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ABSTRACT

Papers in this collection were prepared for the annual meeting of the North Central Association of Colleges and Schools. This volume contains papers related to promoting student learning and effective teaching. Chapter 1, "Developing and Sustaining a Culture of Assessment," contains: (1) "Developing the Scholarship of Assessment" (Thomas Anthony Angelo); (2) "The Convergence of Assessment and Scholarship of Teaching and Learning" (David Sill, Douglas Eder, Lesa Stern, Susan Thomas, and John DenHouter); (3) "Creating an Assessment Culture" (Colene J. Lind and Mark McDonald); (4) "Employee Development to Campus Development" (J. Janelle Masters and Jane M. Shreck); (5) "Engaged Learner and Assessment" (Jian R. Sun and Greg Miller); (6) "From Crisis to Culture" (Rebecca Wojcik, Eric Martin, and Joyce Kennedy); (7) "Cultivating a Culture of Assessment of Student Learning at Rochester Community and Technical College" (Tammy J. Lee and Anne M. Niccolai); (8) "Assessment of Student Learning" (Patricia Dwyer); (9) "Taking Assessment Off the Shelf" (Sandra S. Bowles and Alan R. Belcher); and (10) "Integrating Assessment into College Life" (Barbara Edwards, Vincent Holtmann, Kelley Raftery, and Brad Sparks). Chapter 2, "Assessment Processes," contains: (11) "Assessing an Institution's Outcomes Assessment Efforts" (Jessica Jonson, Julie Wallin, and Karla Sanders); (12) "Assessing Student Learning: Elegance in Simplicity" (Gloria M. Rogers); (13) "Ensuring the Assessment Investment Pays Off" (Andrea Greene, Gail Mee, and Gayla Preisser); (14) "Evaluating Assessment" (Janice Collins and Josh Bullock); (15) "Gauging the Level of Faculty Participation in Student Academic Assessment" (Steve Boettcher, Bryan Tippett, and Clay Goodman); (16) "Are We There Yet? One Institution's Assessment Adventure" (Anneliese Homan and Beverly Wilkerson); (17) "The Road Not Taken" (Karen Jones, Michael L. Banks,

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and Jacqueline Gray); (18) "'Now Is the Summer of Our Discontent'" (Lisa Brandom); (19) "A Balancing Act" (Donald Carpenter and Badih Jawad); and (20) "Broadening the Discussion" (Jacqueline Johnson and Robert Ferguson). Chapter 3, "Assessment Tools and Measures," contains: (21) "Living beyond Our Means" (John C. Simonson and George E. Smith); (22) "A Handbook of Assessment for the Layperson" (Kenneth R. Ryalls); (23) "Activating Assessment of Student Learning" (Judith Neill and Jeanne Williams); (24) "Educating Seniors, Assessing Ourselves" (Beth Rigel Daugherty, Dan Thompson, and Susan Thompson); (25) "Active Learning" (Cy Leise); and (26) "English 101 Writing Assessment That Keeps Both the 'Quants' and the 'Quals' Happy" (Lynn Sykes and Helen Szymanski). Chapter 4, "General Education: Assessing Outcomes, Reforming Programs," contains: (27) "Creating and Implementing a More Focused and Effective General Education Program" (John C. Catau, William H. Cheek, and James P. Baker); (28) "It Can Happen" (Eric Gardner, Diane Boehm, Clifford Dorne, and Mary Hedberg); (29) "Assessing the Achievement of General Education Objectives" (Irene Kovala, Trudy Bers, Gary Mines, and Suzanne Stock); (30) "Effective General Education Assessment at Large Public Institutions" (Julie Wallin and Brenda Masters); (31) "Assessing the Ineffable Outcomes of General Education through Electronic Student Portfolios" (Sharon J. Hamilton); (32) "Assessing Critical Thinking in the General Education Program" (Becky J. Chadwick and Kim D. Schopmeyer); and (33) "Assessing Critical Thinking across the Curriculum" (Nannette Bagstad, Paul Batesel, Ronald Semmens, and Mark Skean). Chapter 5, "Assessing and Supporting Effective Teaching," contains: (34) "Integrating Faculty Development and Outcomes Assessment" (John Neibling, Alan Jacobs, and John Nagy); (35) "Effective Performance-Based Evaluation of College Faculty" (Earl Nicodemus); (36) "Data-Driven Decision Making" (Nancy Blackford and Kate Wiles); (37) "Capitalizing on Internal Talent" (Alex Birkholz and Renelle Gill); and (38) "Developing the Capacity for Synthesis" (Carol Canavan). Many papers contain references. (SLD)

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Volume 3: Promoting Student Learning and Effective Teaching

2003 Edition

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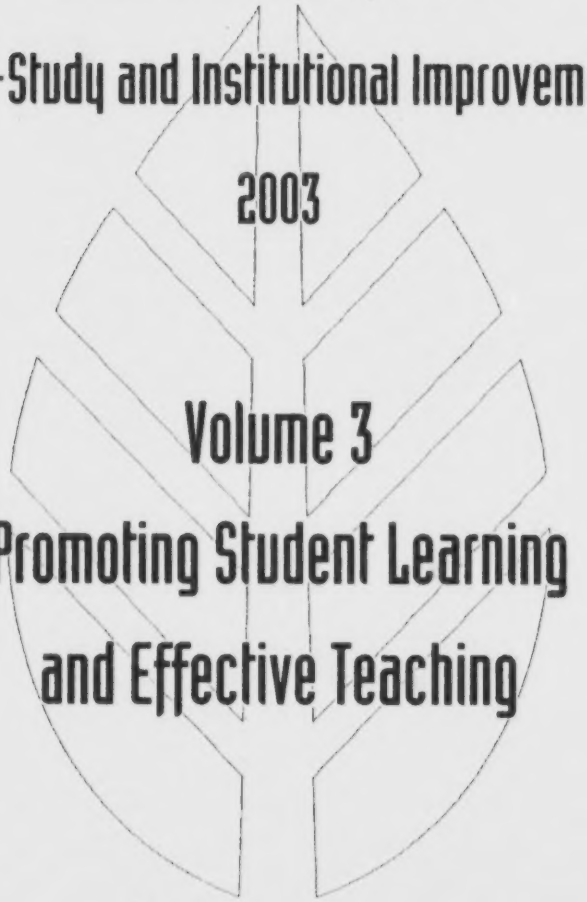

Volume 3
Promoting Student Learning and Effective Teaching

Prepared for the program of
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Restructured Expectations: Building New Partnerships for Learning
at the 108th Annual Meeting of the North Central Association
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A Collection of Papers on Self-Study and Institutional Improvement
2003

Volume 3

Promoting Student Learning and Effective Teaching

Susan E. Van Kollenburg, Editor

The papers included in this collection offer the viewpoints of their authors. The Commission highly recommends them for study and for the advice they contain, but none represent official Commission directions, rules, or policies.

This publication is part of a set of four volumes:

Volume 1: Establishing and Sustaining Effective Connections
- Building New Partnerships for Learning
- State, Regional, and National Initiatives

Volume 2: Organizational Effectiveness and Future Directions
- Mission, Planning, and Organizational Change
- Quality Improvement in Higher Education
- Using New Technology to Enhance Student Learning
- Effective Learning Environments

Volume 3: Promoting Student Learning and Effective Teaching
- Developing and Sustaining a Culture of Assessment
- Assessment Processes
- Assessment Tools and Measures
- General Education: Assessing Outcomes, Reforming Programs
- Assessing and Supporting Effective Teaching

Volume 4: The Self-Study Process for Commission Evaluation
- Self-Study and Commission Evaluation: Coordinating the Self-Study
- Self-Study and Commission Evaluation: Practical Advice
- From the Eligibility Process through Initial Evaluation

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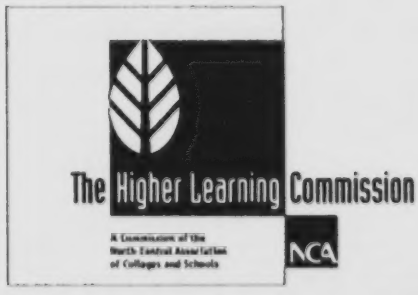

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A Collection of Papers on Self-Study and Institutional Improvement

Volume 3: Promoting Student Learning and Effective Teaching

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Foreword

It can be argued that the word "partnership" should be used cautiously and with care. After all, it does have a specific legal meaning about a shared, contractual business venture. The theme of this 108th Annual Meeting program was chosen with a much broader appreciation for the term: through partnerships "partners" share a common activity or interest. In fact, this *Collection of Papers* is testimony that both types of partnerships are growing in importance to our membership.

We claimed in the 1990s that higher education was undergoing a major transformation. Technology fueled much of the change. So also did the changing demographics of our students. Today finances have come to be another very significant driver for change. Effective learning environments demand more and more use of technology; services to diverse students require a richer array of programs and support services; at the same time funds from states dwindle and investment portfolios fail to perform. If higher education is going to meet growing demands, it inevitably must turn to new and different organizations to help share the design, support, and costs. New business partnerships, some among colleges and universities but many with private corporations, come into play. These are, in fact, partnerships in the legal, contractual understanding of the word. We need to know more about these, to identify what the appropriate quality assurance interests might be in them, and to disseminate best practices in them. Several of the papers presented in this *Collection of Papers* give us significant help in all these matters.

We have an even larger growth of partnerships that emerge from sharing of common interests. How do colleges and universities work together and with the K-12 sector to create effective educational pathways for students? How do groups of institutions create ways to share the endeavors of creating effective e-Learning courses and programs? What issues must be solved for two or more colleges to create a shared degree or a shared set of student services? These types of partnerships figure prominently in many papers in these volumes.

Accreditation is really a tremendous exercise in creating partnerships as well. Within any given college, the success of a self-study process engages the Commission, the self-study team, and all the constituents of that college. The Commission's peer review processes depend on the willingness of its members to share the talents of site visitors and decision-makers. The Commission strives to build and maintain good relationships with state and federal governments also concerned about the quality of colleges and universities. Several of the papers in these volumes speak to these partnerships.

A considerable number of papers focus on two major Commission projects involving partnering with affiliated institutions. AQIP constitutes the most path-breaking experiment in recasting accrediting relationships, relationships of institutions to the Commission and institutions to each other. From these essays we learn about the power of this new approach. Effective and meaningful assessment of student learning still stands as an unmet goal of many colleges. These essays are the richest collection to date of accounts of the successful efforts of some institutions to create a new culture supportive of assessment.

Last, but not least, with the adoption this February of the new Criteria for Accreditation, the Board of Trustees not only integrated institutional and business partnerships into accreditation standards but also challenged its affiliated organizations to focus on the future, on their support for learning, on their connectedness, and on their attention to their own distinctivenesses. Not many papers in this volume speak to directly to this new partnership meant to "serve the common good by assuring and advancing the quality of higher learning." But discussion about it will be central to the Annual Meeting itself and the fruits of the new partnership inevitably will fill pages of future editions of the *Collection of Papers*.

Steven D. Crow
Executive Director

March 1, 2003

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Preface

On behalf of the Commission, I am pleased to present the 2003 edition of the Collection of Papers on Self-Study and Institutional Improvement. Now in its nineteenth year, the Collection of Papers has moved beyond a supplement to the Meeting presentations to be a remarkable resource throughout the year for all who are interested in issues of higher education quality. We are grateful to our speakers for their generous contributions to the work of the Commission through these papers as well as through their presentations at the Annual Meeting.

With this edition, the Collection of Papers moves into a new phase of publication. The contributions of our speakers have grown in both number and substance. Topics once addressed in two or three papers, are now featured in twenty or more. It is no longer practical or useful to publish these papers in a single volume. Therefore, this Collection is presented as follows:

Volume 1. Establishing and Sustaining Effective Connections flows from the theme of this year's meeting, providing a wide variety of examples of new partnerships being forged by higher learning organizations and highlighting some state, regional, and national initiatives.

Volume 2. Organizational Effectiveness and Future Directions focuses on the relationships among mission, planning, and organizational change; quality improvement in higher education, including a number of papers from institutions participating in the Commission's Academic Quality Improvement Project; the various challenges and opportunities offered by technology; and the role of effective learning environments in achieving institutional goals.

Volume 3. Promoting Student Learning and Effective Teaching features three chapters on the role of assessment in the improvement of student learning; a fourth chapter is devoted to assessing and reforming general education; the fifth chapter focuses on assessing and supporting effective teaching. For the fourteen years of the Commission's Assessment Initiative, the Collection of Papers has highlighted institutional efforts to assess student academic achievement. It is important to note that discussions of assessment efforts are not limited to this volume, but appear in numerous papers throughout the four volumes.

Volume 4. The Self-Study Process for Commission Evaluation, offers useful advice on organizing and conducting self-study and undergoing a team visit based on actual experience; it includes one case study on seeking and attaining initial status with the Commission.

Producing a book of this size in five weeks requires significant team effort. Special thanks are given to the following individuals who made the 2003 Collection possible: Larissa Kessler, for her help in processing initial submissions and preparing files; Sybil Sosin, for her valuable editorial assistance; Gerald Van Kollenburg, for his extraordinary assistance with the layout, particularly the charts and graphics; Kathleen Herring, for the beautiful cover designs; and Aaron Marsh of Honi Graphics, for always getting the book printed in time for the Meeting.

The Commission invites your comments about the Collection of Papers and welcomes your suggestions for future topics for the Annual Meeting program. I hope that you will consider participation as a speaker at a future Meeting. The strength of the Annual Meeting lies in the willingness of our institutions to share their experiences with others. I look forward to seeing you in at the Meeting.

Susan E. Van Kollenburg
Editor
Associate Director for Programs, Publications,
and Member Services

March 1, 2003

Ed. note: The name of the Commission was changed from the Commission on Institutions of Higher Education to The Higher Learning Commission effective January 1, 2001. In their papers, authors may have referred to this organization as the North Central Association, the Commission on Institutions of Higher Education, or The Higher Learning Commission. Information about the name change is available on the Commission's web site: www.ncahigherlearningcommission.org.

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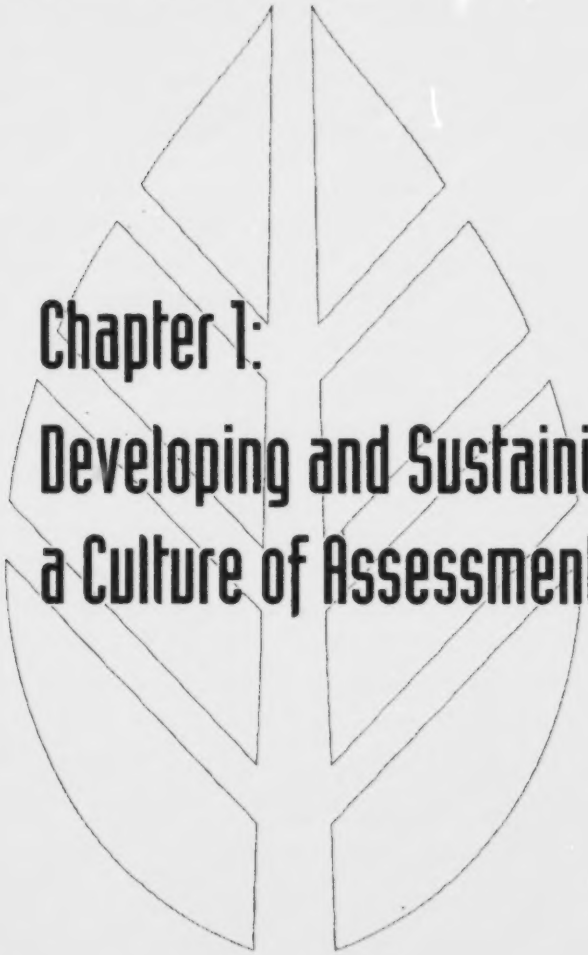
A Collection of Papers on Self-Study and Institutional Improvement, 2003

Volume 3: Promoting Student Learning and Effective Teaching

Chapter 1: Developing and Sustaining a Culture of Assessment



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Restructured Expectations: Building New Partnerships for Learning

Program of
The Higher Learning Commission

108th Annual Meeting of the North Central Association

April 13 – 16, 2003 • Hyatt Regency Chicago

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Developing the Scholarship of Assessment: Guidelines and Pathways

Thomas Anthony Angelo

Focus and Audience

This paper focuses mainly on small-scale, faculty-directed assessment efforts and mostly on **how** and **who** questions. Specifically, it suggests **how** to build in success by learning from prior reform efforts and by taking a scholarly approach to assessment. It considers **who** it is that a "scholarship of assessment" (SoA) might aim to inform and influence and, consequently, **who** among the faculty should be encouraged to practice the SoA. It also suggests **how** best to engage, support, and sustain faculty practitioners in high-quality, high-impact SoA efforts. While it is intended primarily to help faculty leaders and academic administrators responsible for promoting and leading SoA efforts, it should also be useful to those advancing other academic innovations.

Underlying Premises

Four premises undergird the arguments and guidelines that follow. The first is that the SoA can improve educational quality only if it engages enough of the right "producers" and "consumers." That is, a significant fraction of influential faculty leaders (scholarship producers) must engage and succeed in the SoA. At the same time, a much larger proportion of the faculty (scholarship consumers) must be convinced to take these activities seriously as scholarship and to apply SoA results to their teaching. The second premise is that productive, influential faculty will engage in the SoA only if they find it intellectually compelling, professionally rewarding, and relatively unburdensome. The third underlying premise is that—to be intellectually compelling, rewarded, and effective—SoA efforts must be designed and implemented according to the highest, most broadly accepted standards of academic scholarship.

Sources

The necessary conditions and guidelines for success are drawn from three main sources: the growing literature on the scholarship of teaching and learning, research and best practice studies in higher education assessment and faculty development, and literature on the diffusion of innovations and organizational change.

The SoA's "Parents": Assessment and the Scholarship of Teaching

Assessment and the scholarship of teaching are broad-based academic reform movements. The scholarship of assessment is a hybrid of these two movements. Given that the promise of SoA derives largely from its dual parentage, it seems worthwhile to consider the strengths and weaknesses of both.

☐ **Assessment**

According to Palomba and Banta, "Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development" (1999, p. 4). After fifteen years of a widespread assessment "movement," there is now broad agreement among accrediting agencies, disciplinary and professional associations, administrators, and faculty opinion leaders that improving student learning is (or should be) the primary goal of assessment. That all of our accrediting agencies require assessment and that virtually all American colleges and universities claim to be practicing it (El-Khawas, 1995) are evidence of its wide and still growing influence. At this point in its development,

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Many of the ideas in this paper have been drawn directly from Angelo, T. A. "Engaging and Supporting Faculty in the Scholarship of Assessment: Guidelines from Research and Best Practice," Chapter 10 in T. W. Banta et al., *Building a Scholarship of Assessment*. San Francisco: Jossey-Bass, 2002.

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assessment is a relatively mature innovation that can claim a range of resources, a growing literature, and a large network of practitioners (see Gardiner, Anderson, & Cambridge, 1997; Banta, Lund, Black, & Oblander, 1996).

☐ The Scholarship of Teaching and Learning

More recently, widespread consensus has begun to emerge among these same leadership groups on the need to expand the range of scholarly activities and faculty roles that are encouraged, evaluated, and rewarded. This notion of an expanded model of scholarship, and of the scholarship of teaching in particular, was first championed by Boyer (1990) and Rice (1991). Building on their work, scholars associated with the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL)—notably Glassick, Huber, and Maeroff (1997) and Hutchings and Shulman (1999)—developed definitions, examples, and standards for evaluating this form of scholarly activity.

But what is the scholarship of teaching or the scholarship of teaching and learning, since the two terms are used virtually interchangeably? According to Hutchings and Shulman (1999), "A scholarship of teaching is not synonymous with excellent teaching. It requires a kind of 'going meta,' in which faculty frame and systematically investigate questions related to student learning—the conditions under which it occurs, what it looks like, how to deepen it, and so forth—and do so with an eye not only to improving their own classroom but to advancing practice beyond it" (p. 12). Throughout, CASTL materials characterize it as discipline-based, public ("community property"), open to critical peer review and evaluation, and capable of being adapted and used by other teachers in the same discipline. With support from the Carnegie Foundation, the American Association for Higher Education, and the Pew Foundation, CASTL has created an infrastructure for developing and disseminating the scholarship of teaching and learning, along with a number of useful publications ‹see http://www.carnegiefoundation.org/›. As of late 2002, well over one hundred campuses are formally involved in these efforts, and many more are engaged in activities influenced by CASTL.

The Limited Impact of Assessment and the Scholarship of Teaching

Notwithstanding these impressive achievements, neither assessment nor the scholarship of teaching has yet to make the deep and lasting impact on teaching and learning quality or academic culture that proponents have hoped for. In their review of the last two decades of reform attempts, Lazerson, Wagener, and Shumanis assert that "efforts to improve teaching and learning have been supported only in part by faculty and institutions as a whole, with results that are neither significant nor pervasive" (2000, p. 14) and conclude that "a genuine teaching-learning revolution seems far away" (p. 19). The same can be said of the scholarship of teaching at the end of its first decade. If the scholarship of assessment is to succeed, we must find ways to get unstuck and penetrate deeper into academic culture. That requires first correctly diagnosing the reasons that promising and widely supported academic change efforts, such as assessment, so often fail to meet expectations.

In a 1997 *AAHE Bulletin* article, Peter Ewell offers a compelling diagnosis of failed academic reforms, noting that they have "been implemented without a deep understanding of what 'collegiate learning' really means and the specific circumstances and strategies that are likely to promote it" and "for the most part been attempted piecemeal within and across institutions (p. 3). I would add a third, related reason: Reforms have been implemented without a deep understanding of how faculty themselves learn and develop, of how change occurs in academic culture, and of the most effective strategies and approaches for promoting lasting change.

The Scholarship of Assessment

By all rights, the scholarship of assessment should be an attractive and effective innovation, given that it has the potential to respond to many real, widespread needs in higher education. For example, it has long been recognized that most American faculty members do not, in fact, engage in the "scholarship of discovery"—in the traditional disciplinary forms of research that result in publication in refereed journals and grants—and that most faculty members both care about teaching and believe that it is undervalued. Partly for those reasons, many American universities are now revising or have already revised their retention, tenure, and promotion policies to include a broader conception of scholarship and to reward a broader range of scholarly activities. A likely expectation of administrators and trustees backing these changes is that a greater proportion of the faculty will engage in documentable and meaningful scholarly activities. Thus, while this broadening of options will benefit faculty members who are already engaged in less traditional forms of scholarly activity, it may also impel significant numbers to develop new skills and interests.

To respond to changed expectations and take advantage of these wider options, many faculty members will need training and support in systematic, straightforward ways to do scholarly work on teaching and learning issues. The SoA can provide such an approach. Academic administrators, in turn, need more valid and useful information on teaching and learning effectiveness for personnel decisions, public relations, program review, and accreditation. But few institutions can afford to invest the additional staff and financial resources needed to generate this information through existing institutional research and assessment processes. Faculty engaged in the SoA could help provide such information, along with the knowledge and judgment needed to make use of it. Those responsible for assessment, faculty development, and accreditation need effective ways to engage and sustain faculty involvement

in those efforts. By engaging large numbers of faculty in applied inquiry, the SoA could respond to these organizational development needs as well. Consequently, the SoA holds great promise for engaging faculty in activities to document and improve teaching effectiveness and student learning quality that are both institutionally and individually valuable.

But promising ideas alone—even ones that meet real needs—are not sufficient to change academic culture, as the past half century of attempts to disseminate innovations amply demonstrates. A short list of promising but largely unrealized reforms might include educational television, programmed learning, mastery learning, writing across the curriculum, computer-assisted learning, and multi-media instruction.

How can the SoA avoid this common fate? First and foremost, realizing the promise of the SoA will require its "champions" to recognize and apply lessons learned from previous academic innovations, both successful and unsuccessful, and from research on the diffusion of innovations more generally. Second, it will require alignment among three key elements: institutional systems, faculty culture, and leadership for change. In other words, it will require a more systematic, strategic, and scholarly approach to innovation. Taking these hard-won lessons seriously can better the odds that faculty will engage and persist in the scholarship of assessment, and thus increase our collective understanding of and capacity to improve student learning.

Some Necessary Conditions for Academic Reform

Several interrelated conditions seem necessary, albeit not sufficient, for an academic innovation to succeed. First and foremost, the proposed reform has to meet strongly felt faculty needs as well as institutional priorities. Second, it must conform to the values and culture of the faculty. Third, it requires effective leadership and "followership," including involving influential faculty members from the start. Fourth, it requires long term planning and a long term institutional commitment. Fifth, success requires well aligned support from the key systems that affect faculty life, including tenure and promotion, merit, course and faculty evaluation, workload distribution, and faculty development. Sixth, it requires resources, which often means redistributing time, energies, and effort. And last, it requires "scaffolding,"—programs and services designed to support faculty through the difficult process of reflection, unlearning, experimentation, and critique that change involves.

Whom to Involve When

Perhaps the greatest challenge both the assessment and scholarship of teaching movements face is engaging and sustaining broad and deep faculty involvement. Indeed, this is a problem common to all academic innovations—and innovations generally. In *Diffusion of Innovations*, Rogers provides a framework for analyzing this problem. He sorts members of organizations into the following categories by their responsiveness to innovation: innovators, early adopters, early majority, late majority, and laggards (1995, pp. 252–280). Rogers characterizes innovators as venturesome, risk- and failure-tolerant cosmopolitans who are well connected to wide networks of innovators outside their organizations. Though innovators are the bringers of change, they are not necessarily highly respected local opinion leaders (pp. 263–264). Early adopters, on the other hand, are typically well-respected local opinion leaders whose championing of innovations is necessary, if not sufficient, to make change (p. 264). These two categories typically make up less than a fifth of the total population of any organization. Early adopters convince the early majority, the next third or so, to try the innovation.

The assessment movement has struggled to expand and sustain faculty involvement beyond the innovators and early adopters. Unless new approaches to scholarship and assessment reach beyond these first two categories of disseminators, neither movement is likely to become an integral part of academic culture. By extension, the same caveats hold for the scholarship of assessment.

Ten Guidelines for Promoting, Supporting, and Sustaining the Scholarship of Assessment—and Other Academic Innovations— to Improve Learning

1. **Plan for a long-term campaign.** Successful innovations typically take years to become part of the majority's standard practice, often a minimum of three to five years. Consequently, it's critical to plan for a several-stage, multiyear campaign that can persevere until assessment is fully integrated into the local academic culture.

2. **Engage and involve opinion leaders from the start.** In general, who we begin with determines whom we end up with. Start by recruiting academic opinion leaders from groups we hope to involve, rather than recruiting the easy and obvious participants. An initiative that starts with post-graduate teaching fellows, new faculty, or the "usual zealots," for example, is likely to be perceived as being useful only to those groups. Department chairs are among the most critical actors to involve.

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3. **Keep the focus on what matters most: improving student learning.** The more reasons faculty members find to engage in assessment, the better. The main attraction and promise of assessment are its focus on improving student learning, a focus most faculty share. Taking this aim seriously, however, means finding valid and accessible ways to measure student learning, rather than just involvement or satisfaction.

4. **Identify likely costs and benefits—intrinsic and extrinsic; then lower costs, raise benefits, and look for multiplier effects whenever possible.** Potential assessors need to know what's in it for them, and what it will cost them. Costs of engaging in assessment center around time, effort, and frustration. While costs can never be totally eliminated, they can be minimized. Likely benefits are multiple and relatively easy to capitalize on. Administrators need cost-effective ways to get information on student learning. Faculty need meaningful research projects for professional development and career advancement. Post-graduate and undergraduate students perpetually need funded employment and research opportunities. Providing support for student apprentices on assessment projects can generate multiplier effects all around.

5. **Start with the familiar and make connections.** This well-supported guideline for effective learning applies to faculty as well as students. In the case of faculty learning to use assessment, familiar elements are the everyday teaching and testing practices they have observed and experienced. For faculty, making connections between their prior knowledge and experience and assessment—understanding key similarities and differences—will be critical to success. Walvoord and Anderson (1998) offer a powerful way to build on the familiar by engaging faculty in turning grading into a rigorous, useful form of assessment.

6. **Provide scaffolding for novice and intermediate practitioners.** Most academic innovations begin with training and support for novices, and most end there. But most participants need ongoing support well beyond the novice phase. As assessment practitioners become more experienced, the amount of structure, or scaffolding, they require diminishes.

7. **Develop and sustain social supports for practitioners.** Changing academic practice is like changing any set of habits or patterns. Support groups demonstrably improve the perseverance and success of those trying to lose weight, stop smoking or drinking, and develop exercise routines. In the same way, assessment support groups can increase faculty perseverance and success.

8. **Don't pay participants to do what should become part of routine practice.** Academic development projects, particularly those with grant funding, often offer stipends to participants for engaging in the desired new behaviors. All too often, faculty stop engaging in those behaviors when stipends stop. New recruits are hard to find after the money runs out. If we want faculty to engage in assessment over the long term, paying them initially is a risky strategy. Instead, use available funds for books, related travel, student support, and the like.

9. **Insist on clear criteria, evidence, and high standards for quality.** For assessment to become an accepted, consequential form of scholarly activity, it must be evaluated by scholars against meaningful, agreed-upon criteria. Thanks to Glassick, Huber, and Maeroff (1997) and the Carnegie Foundation, we now have six criteria: *clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique.* The challenge for institutions and departments is to adapt these broad criteria to specific needs and circumstances and to different forms of the scholarship of teaching, including the scholarship of assessment.

10. **Share information on efforts, findings, and successes widely.** To be credible and useful, assessment results must become community property. If assessment is a kind of public education campaign, then the "public" will require many and various messages before they get the point. For many faculty members, definitions matter less than examples, and numbers less than narratives. Planning ahead and using assessment to gather illustrative examples and stories are critical steps in engaging faculty.

References

Angelo, T. A. 2002. Engaging and supporting faculty in the scholarship of assessment: Guidelines from research and best practice. Chapter 10 in T. W. Banta et al., *Building a scholarship of assessment.* San Francisco: Jossey-Bass.

Banta, T. W., et al. 2002. *Building a scholarship of assessment.* San Francisco: Jossey-Bass.

Banta, T. W., J. P. Lund, K. E. Black, and F. W. Oblander. 1996. *Assessment in practice: Putting principles to work on college campuses.* San Francisco: Jossey-Bass.

Barr, R. B., and J. Tagg. 1995. From teaching to learning: A new paradigm for undergraduate education. *Change 27*(6): 12–25.

Boyer, E. L. 1990. *Scholarship reconsidered: Priorities of the professoriate.* Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

El-Khawas, E. 1995. *Campus trends, 1995.* Higher Education Panel Report No. 85. Washington, DC: American Council on Education.

Ewell, P. T. 1997. Organizing for learning: A new imperative. *AAHE Bulletin* 50(4): 10–12.

Gardiner, L. F., C. Anderson, and B. L. Cambridge. 1997. *Learning through assessment: A resource guide for higher education.* Washington, DC: American Association for Higher Education.

Glassick, C. E., M. T. Huber, and G. I. Maeroff. 1997. *Scholarship assessed: Evaluation of the professoriate.* San Francisco: Jossey-Bass.

Hirschhorn, L., and L. May. 2000. The campaign approach to change: Targeting the university's scarcest resources. *Change* 32(3): 30–37.

Hutchings, P., and L. S. Shulman. 1999. The scholarship of teaching: New elaborations, new developments. *Change* 31(5): 10–15.

Lazerson, M., U. Wagner, and N. Shumanis. 2000. What makes a revolution? Teaching and learning in higher education, 1980–2000. *Change* 32(3): 13–19.

Palomba, C. A., and T. W. Banta. 1999. *Assessment essentials: Planning, implementing and improving assessment in higher education.* San Francisco: Jossey-Bass.

Rice, E. 1991. The new American scholar: Scholarship and the purposes of the university. *Metropolitan Universities* 1(4): 7–18.

Rogers, E. M. 1995. *The diffusion of innovations*, 4th ed. New York: The Free Press.

Thompson, S. 2001. Lessons learned in implementing the scholarship of teaching and learning. *The National Teaching and Learning Forum* 10(5): 8–10.

Walvoord, B. E., and V. J. Anderson. 1998. *Effective grading: A tool for learning and assessment.* San Francisco: Jossey-Bass.

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The Convergence of Assessment and Scholarship of Teaching and Learning

David Sill, Douglas Eder, Lesa Stern, Susan Thomas, and John DenHouter

After fifteen years of assessment and a decade of scholarship of teaching and learning, the two initiatives are converging. The best assessment has become the best scholarship of teaching and learning, and vice versa. This paper will discuss the background and history of these initiatives at Southern Illinois University-Edwardsville and will present illustrating examples of where this convergence is occurring: the assessment scholars program, the senior assignment, and course portfolios. The convergence of assessment and scholarship of teaching and learning helps address two problem areas or challenges that campuses have faced in trying to develop strong and effective assessment programs: ownership and depth.

The first of these problem areas, achieving faculty ownership for the process and the results, is an ongoing challenge for meaningful campus-level assessment of student learning. Because the faculty is responsible for what goes on in the classroom and for the curriculum, faculty ownership is important if assessment is to effect improvements in student learning. To develop faculty ownership, we must ensure that assessment is an activity worth doing and that the results of assessment are considered worthwhile, meaningful, and valid.

The second of the problem areas, depth, is an often unspoken question that haunts many assessment programs: "Are we measuring what is important, or are we making important what we can conveniently measure?" Goals of higher education that go beyond skills and content are exactly what distinguish higher education from being just a higher level of secondary education. Goals of higher education include character and intellectual development. They include beliefs, values, morals, attitudes, ethics, and citizenship on the one hand, and habits of the mind and practice, competence, and professional behaviors on the other. Yet character and intellectual development are difficult to assess. We have come to know that there is a need for a deeper assessment of student learning than what is available through standardized tests, capstone projects, and student surveys. At best, these measure student mastery of skills and content, but more often they do not even do that. Rather, they often focus on how students feel about their mastery of skills and content instead of directly monitoring actual student achievement. Furthermore, even valid measurements of skills and content are limited in assessing the distinguishing goals of higher education. In addition, they provide little insight into the relationship between what students learn and the ways in which they learn it, both in terms of pedagogy and curriculum. The challenge is for higher education to apply the depth and level of intellectual rigor to the assessment of student learning that we routinely demand of our work in disciplinary-based research.

Higher education does not have a good track record of involving its primary resource, the faculty and its scholarship, to the study and improvement of higher education itself. Trudy Banta, from Indiana University-Purdue University Indianapolis, and others have begun to address this challenge by thinking in terms of the scholarship of assessment (Banta et al., 2002). SIUE has taken a second approach by drawing on an independent body of work—the scholarship of teaching and learning, as developed by the American Association for Higher Education's (AAHE) Teaching Initiative and the Carnegie Academy for the Scholarship of Teaching and Learning. Over the last decade, assessment and the scholarship of teaching and learning have developed as separate initiatives. Even within AAHE, which has supported both of them, the two initiatives have been segregated into two conferences, the Forum on Faculty Roles and Rewards in the winter and the Assessment Conference in early summer. In spite of that separation, even from the beginning there has been an aspect of the scholarship of teaching that involved student learning:

> No longer can we think of teaching in the terms of the old formula: subject-matter expertise plus generic methods (how to plan a lecture, lead a discussion group...) equals good teaching. Effective teaching is also a matter of transforming one's knowledge of a subject in ways that lead to student learning. (Edgerton et al., 1991)

At SIUE, as more and more faculty have become involved in those separate activities, the faculty's work has begun to converge to the point where the best examples of assessment on campus are clearly scholarship of teaching and learning activities and vice versa.

History of Assessment and Scholarship of Teaching and Learning at SIUE

SIUE's faculty senate included outcomes assessment in its annual goals in 1985 and again in 1986, specifying that the faculty senate would "work with the administration in coordinating the various activities associated with outcomes assessment" and would

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"encourage and participate in an investigation [of] various methods of outcomes assessment" (University Committee on Assessment, 1989). In September 1986, the Illinois Board of Higher Education (IBHE), in its *Report of the Committee on the Study of Undergraduate Education*, called for Illinois colleges and universities to "develop appropriate means to assess student progress in meeting the objectives of general education and the development of baccalaureate-level skills" and to "assure that assessment programs reinforce the maintenance of academic standards" (IBHE, 1986).

Over the following two and a half years, SIUE developed the university assessment plan, which was approved by the faculty senate in April 1989. That plan was created and implemented based on principles of faculty involvement and leadership from the beginning, faculty ownership of the process, significant administrative support, and the housing and creating of major parts of assessment in the disciplines. Entry and midpoint assessment began in 1989, with the senior assignment (SRA) fully developed and implemented by all programs in fall 1992. Each SRA was designed to enable seniors to exhibit a general education perspective while demonstrating proficiency in the major. In 1995, the midpoint assessment was changed to include a broad range of activities, such as student portfolios and the assessment scholars program.

In November 1994, an IBHE staff report announced a goal "to create a base for change and to encourage institutions to organize and expand their efforts to address faculty roles and responsibilities" (IBHE, 1994). SIUE began its faculty roles and responsibilities initiative in spring 1995, with its first symposium in fall 1995 and a white paper and a formal plan that were submitted to the faculty senate and to the IBHE. The original steering committee chose to concentrate SIUE's efforts on peer review of teaching and the scholarship of teaching and learning. In the following years, the faculty senate formed a subcommittee of the faculty development council to coordinate and provide leadership for the initiative.

In fall 2002, SIUE's faculty roles and responsibilities committee and the provost's office sponsored a symposium that explored the connections between scholarship of teaching and learning and assessment. During that symposium, we identified the following common characteristics in which both activities

- Identify an issue of teaching or learning
- Study that issue through appropriate methods
- Apply results to teaching practice
- Communicate the results to others
- Engage in self-reflection and peer review

Scholarship of teaching and learning and assessment of student learning have become fellow travelers. Hutchings and Shulman captured this common core when they said that the scholarship of teaching and learning "requires a kind of 'going meta,' in which faculty frame and systematically investigate questions related to student learning—the conditions under which it occurs, what it looks like, how to deepen it, and so forth—and do so with an eye not only to improving their own classroom but to advancing practice beyond it" (Hutchings and Shulman, 1999).

It is important to note that both assessment and scholarship of teaching and learning, which are collective faculty responsibilities, occur at different levels or scales of organization—in individual courses, within disciplines, and across the baccalaureate curriculum (and indeed across the graduate curriculum). This paper looks at examples at each level. The assessment scholars program allows for an institution-wide probing of student learning as it relates to the statement of objectives for general education and the baccalaureate degree, in this example with a special focus on student writing. The senior assignment, in psychology for example, allows for formal assessment of student learning at the program level in the undergraduate psychology major and general education by the psychology faculty. The course portfolio provides a mechanism at the course level for a rigorous, scholarly study of course pedagogy, student learning, and the connection between the two. In the example from art and design, faculty developed course notebooks for the foundation art studio courses to allow common understanding of student learning goals among faculty who teach those courses and accordingly to allow for a shared means of assessing that student learning across sections and instructors.

Assessment Scholars Program

The assessment scholars program connects the assessment of student learning outcomes and the scholarship of teaching and learning in a traditional scholarly format. In 2000, the program awarded fellowships to faculty for undertaking formal research on an announced student learning topic. Selection is based on a competitive peer review of formal research proposals.

For the past eight years, the SIUE assessment office has collected student portfolios. Our library of student work allows us to ask questions such as the 2000–2001 focus topic, "To what extent and by what means do students learn to write better at SIUE?" The three scholars took varied approaches. One addressed programmatic issues in comparison with writing programs at other universities;

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another addressed the extent to which the writing quality of juniors and seniors is better than that of freshmen and sophomores; and the third addressed the kinds of written feedback that professors are providing to students on their papers. The assessment scholars examined written work and professors' responses within the portfolios as they would any primary sources and arrived at conclusions supported by evidence. The scholars wrote manuscripts and submitted their findings to refereed journals for peer review (note that confidentiality of individual findings was maintained and results were published in the aggregate).

In general, universities delegate issues of writing to the English department, whereas most writing is done outside the English curriculum. One important aspect of this first round of assessment scholars was that the faculty were from philosophy, educational leadership, and speech communication, which provided a more diverse and fresh perspective on writing than if the faculty had come from an English background. Involving a broad spectrum of faculty to address a university-wide issue such as writing has been one of the benefits of the 2000–2001 assessment scholars program.

The longitudinal portfolio data collected from students with diverse career goals and majors provided another important aspect of this program. SIUE's portfolios are *dictated portfolios* in that they contain pieces of work required by the assessment office, not items selected by the students. The portfolios contain both drafts and final versions of papers, as well as essays and other smaller writing assignments that might be overlooked in a study that examined more traditional English writing samples. Yet all forms of writing can be valid for assessment purposes. A memo or a brief may be a more legitimate form of writing sample in the business or legal world than a five-paragraph academic essay. Because the dictated portfolios include all student papers, not just those that are selected by students or faculty as best practices, both student and faculty paper selection bias is removed, avoiding a weakness of many studies assessing student writing. This facet is particularly important for the assessment scholars project that focused on faculty comments on student papers. Also, SIUE faculty did not routinely know which students participated in the portfolio project, although the information was available publicly. We can be confident that the comments on the portfolio papers were typical and real and represented common practice.

The convergence of assessment and the scholarship of teaching and learning became visible as the assessment scholars presented their thoughts, methods, and findings to the faculty as a whole. Several informal brown-bag sessions and more formal presentations (such as the SIUE fall faculty symposium) have highlighted assessment and the assessment scholars' work. After the presentations, faculty from all departments took part in lively discussions that highlighted the issues, problems, and struggles that faculty and students faced in improving student writing, as well as success stories and sharing strategies faculty have found particularly effective. Handouts were provided so that the faculty had tips and advice, based on a wealth of research, on improving student learning, including how to improve feedback given to students. As a result, some faculty members have now rethought the way they design, implement, and comment on student writing assignments.

The assessment scholars program is just one avenue for inquiry, reflection, and debate at SIUE. It has helped enrich a tradition of thinking through, reflecting on, and evaluating teaching and learning over time. Assessment becomes even more meaningful to faculty when the assessment of what and how students are learning (their learning styles, challenges, successes, etc.) in combination with analyses of what faculty are doing (their processes, teaching styles, assignments, etc) actually help both students and faculty meet their goals.

Senior Assignment

At SIUE, the senior assignment (SRA) is an *academic simulator*, that is, a reflective and scholarly engagement between student and dedicated professor resulting in a visible product or behavior. Much like an airplane cockpit flight simulator, SIUE's senior assignment asks students to undertake a complex task under the supervision of an instructor such that teaching, learning, and assessing take place simultaneously. Under the best conditions, assessment is embedded in the teaching and learning process, and the mechanics of assessment are transparent to the student—again, just like in the cockpit flight simulator. It is authentic assessment in that it appraises student performance of a real task in a real or simulated environment under supervision of faculty. The SRA is embedded in learning and teaching, matches departmental goals, and is departmentally owned. It is a high-stakes assessment that is viewed by the faculty and includes a liberal education component.

The SRA in SIUE's psychology department is an ever-evolving process. Initially, students had only one option to complete the SRA. Students would submit a five- to seven-page paper (in APA style with appropriate references) in which psychological knowledge and techniques would be related to an issue of social, ethical, health, or political importance. The psychology faculty would review the paper. Unfortunately, it soon became apparent that the students were not taking the paper seriously and were submitting inferior work, making it impossible to assess whether they were achieving the department's goals for baccalaureate education. By itself, this is an important assessment finding. To improve student performance and the effectiveness of the SRA, the faculty added two options. In addition to the paper, students could

1. design and carry out research as a requirement in an upper level course. Students must explain and defend their projects in formal paper reading or poster sessions (attended by other students and faculty in the department). The best posters are submitted to the annual meeting of the Midwestern Psychological Association for presentation; or

2. design their own independent research projects under faculty supervision. Results of this research are also presented at the annual meeting of the Midwestern Psychological Association or at the departmental paper reading/poster sessions.

Students took the two new options much more seriously, thus giving the department the assessment vehicle it desired. Even though the rigor of the paper option was also increased, it has since been dropped.

The form of the SRA is not the only aspect of the assessment process that has evolved. In examining the SRA options, the department determined that the goals upon which the SRA was based were overly broad and difficult to measure. For example, an initial goal was that students were expected "to be aware of the cultural, social, historical, ethical, and economic impacts of psychological knowledge and techniques." As awareness is very difficult to measure, this goal has been restated, thereby sharpening the faculty's own expectations and standards. The goals now state that students will demonstrate the ability to relate research findings to a broader cultural, social, historical, ethical, or economic realm, and that ability is measured across students as a program goal through primary trait analysis.

Just as the SRA is a scholarly endeavor, so too is its evolution. By examining the data every step of the way, the department learned to restate its baccalaureate goals in measurable terms, employ primary trait analysis, refine its SRA options, and raise its standards. This has permitted the psychology department to develop the SRA into an effective assessment tool and to improve student learning.

Course Portfolio

AAHE's teaching initiative developed course portfolios as one strategy for approaching the peer review of teaching. A course portfolio is a scholarly project, with the course as the unit of inquiry, that begins with an important question and ends with a text that can be shared with peers, who can then build on the work. At the AAHE Forum on Faculty Roles and Rewards in 1996, the work of the teaching initiative on course portfolios was presented by Lee Shulman in a keynote address with a follow-up workshop session with Steve Dunbar (University of Nebraska-Lincoln) and William Cerbin (University of Wisconsin-La Crosse). Subsequently, the SIUE faculty roles and responsibilities initiative sponsored three campus symposia on course portfolios, with Steve Dunbar (1996), Pat Hutchings (1997), and Dan Bernstein (1999) as visiting scholars. During the 1997–1998 academic year, a working group of interested SIUE faculty met monthly to develop models of course portfolios that could be shared with the faculty. Sample course portfolios have been placed on reserve at the library, and a number of those are now available online for SIUE faculty.

In an effort to coordinate the freshman foundation art studio curriculum, SIUE's art and design department has developed and instituted the use of course portfolios for each core class—basic drawing, beginning figure drawing, two-dimensional design, and three-dimensional design. These notebook portfolios are extensively researched reflective documents that were assembled after thoroughly assessing and analyzing the existing curriculum. They were designed to alleviate an unstructured situation stemming in large part from the ever-changing roster of instructors who teach these courses—mainly graduate students and adjunct lecturers. Prior to this, there was inconsistency and lack of cohesion regarding the material being taught.

While recognizing that there is strength in diversity, the art and design faculty feels that it is imperative for every instructor to be consistent in terms of covering and emphasizing specific topics. The course portfolios are both meant to be fluid curriculum guides as they contain different assignments and to allow for individual approaches within each major area. Peer review sessions occur regularly throughout the semester. An assessment benefit of using these portfolios has been the direct comparison of student work produced from similar assignments from across the various course sections. Informed observations can be made, pedagogical strategies devised, and suggestions offered to improve course curricula, meet department goals, and enhance student learning.

Conclusion

William Cerbin, who was a pioneer in the development of course portfolios, made the connection between the scholarship of teaching and learning and assessment in an article in *Journal on Excellence in College Teaching* in 1994. His concern was that higher education had made progress in looking at both student learning and quality teaching, but that the connections between those two critical aspects of a student's education were generally ignored or overlooked. As he wrote:

> Assessments of learning typically document students' knowledge but do not examine how classroom practices contribute to student learning. Traditional methods for evaluating teaching examine instructional practices but often ignore how those practices influence students' learning, thinking, and development. (Cerbin, 1994)

The convergence of the scholarship of teaching and learning, as sponsored by SIUE's faculty roles and responsibilities committee, and the assessment of student learning, governed by our committee on assessment, has allowed us to focus on the interplay (to borrow a word from Cerbin) between teaching practices and student learning. At the same time, it has allowed faculty to assess student learning deeply and has made assessment of student learning a worthwhile and meaningful faculty activity.

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References

Banta, Trudy W., et al. 2002. *Building a scholarship of assessment*. San Francisco: Jossey-Bass.

Cerbin, William. 1994. The course portfolio as a tool for continuous improvement of teaching and learning. *Journal on Excellence in College Teaching* 5(1): 95–105.

Edgerton, Russell, Patricia Hutchings, and Kathleen Quinlan. 1991. *The teaching portfolio: Capturing the scholarship in teaching*. Washington, DC: American Association for Higher Education.

Hutchings, Patricia, and Lee S. Shulman. 1999. The scholarship of teaching: New elaborations, new developments. *Change* 31(5): 10–15.

Illinois Board of Higher Education. 1986. Report of the committee on the study of undergraduate education. IBHE Agenda Item #6A, September 3.

Illinois Board of Higher Education. 1994. Priorities, quality, and productivity of Illinois higher education: Summary and assessment for 1993–94 and recommendations for 1994–95. IBHE Agenda Item #5, November.

University Committee on Assessment. 1989. University assessment plan. Southern Illinois University-Edwardsville. Available at ‹http://www.siue.edu/~deder/assess/plan.html›.

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Creating an Assessment Culture: A Case Study of Success and Struggles

Colene J. Lind and Mark McDonald

Changes in the higher education marketplace exacerbated by an economic downturn have forced many private colleges to the closing point. Since January 1997, 27 of 1,600 private colleges in the United States have closed, a 35 percent increase from the previous five years (Zhao, 2002). To survive, some institutions have changed their identity, shifting curriculum, method of delivery, and mission. Others have changed in name only, dropping the provincial "college" for "university." Our college has contemplated similar changes in a quest for more students, but the shift toward assessment-based improvement of student learning has been a more fundamental challenge.

Our purpose is to review the special case of Bethany College in Lindsborg, Kansas. Like many small colleges, Bethany has struggled to design, implement, and use assessment of its academic programs. While some efforts have been successful on a small scale, Bethany continues to lag in implementation of campus-wide assessment. Our efforts since the beginning of the 2001–2002 academic year, however, represent a significant change. In the past, Bethany struggled to implement assessment as required by external agencies. Now, Bethany is working to create a self-sustaining culture of assessment.

While there are factors that make the Bethany College experience unique, our two most fundamental challenges are common to many institutions. Bethany has struggled to embrace assessment as its own, and Bethany has struggled to motivate and facilitate faculty members in their efforts to assess and improve student learning. What we have learned from our experience may be useful to other regional, private, or financially troubled institutions. Our experiences may also be useful to colleges or divisions within larger institutions.

Background

Bethany is a Lutheran-affiliated four-year college, offering the bachelor of arts degree. While the college maintains a commitment to the liberal arts in the general education and majors offered, the majority of students graduate with professional degrees, including teaching, business, and social work. Located in a rural setting with few recreational opportunities, Bethany struggles to attract and retain students. After gradual declines in enrollment since a high of 788 full-time students in 1980–1981, enrollment has leveled off at about 600 full-time students per year.

For at least ten years, Bethany has made various efforts to implement assessment of student learning, but these efforts mostly have fizzled, partly because of a perception that the college has faced more pressing issues. Our most immediate challenge has been our tuition-driven budget, which has suffered major setbacks as enrollment has declined. Also, administration and faculty turnover has made any long-term project for change difficult to sustain. Since 1989, six different college presidents, five different academic deans, five different registrars, and five different deans of admissions and financial aid have served Bethany College. Over the past seven years, an average of 16 percent of the roughly forty-two full-time faculty members have been new to the institution at the beginning of each academic year.

Beginning in 2001–2002, the new college president, the academic dean, and several faculty members agreed that a new approach was needed. Rather than treating assessment as one more thing for administrators and faculty to do, assessment would need to be integrated into the day-to-day responsibilities of college employees and students. Since this time, Bethany has tried—sometimes with success, sometimes not—to turn from teaching toward student learning as our college's reason for being.

How to Change a Culture

☐ Changing Administration Priorities

When funds do not exist, being creative is a matter of survival. For example, Bethany's administrators agreed that adding a position for an assessment officer would be best. Instead, the dean gave release time from teaching to a faculty member, making

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him responsible for coordination of academic assessment. Finding monies for training, workshops, and off-campus seminars also has been a creative but crucial process.

While the do-what-we-can attitude has allowed our college to survive, we acknowledge that it cannot be a long-term solution. For years Bethany administrations have made generalized commitments to assessment, but without money or resources to back them up, these commitments were empty. We know, however, that even at the most financially strapped institutions there is always money. Spending on assessment simply means not spending on something else.

But when assessment is pitted against other budget priorities, assessment usually loses. Only when the administration assumes that assessment is a regular part of doing business will it receive consistent financial support. At Bethany, we now recognize that to survive, we must distinguish our college from our many competitors. As we work to define our niche, administrators are challenged by a lack of good information. In higher education today, it is too risky to use the finger-in-the-wind method to decide what type of curriculum to offer, what teaching methods are most effective, or which students to recruit. From this perspective, assessment is a state of being, not a corner that can be cut.

Administrative support for and participation in a ten-member Bethany team that attended a recent AAHE-Higher Learning Commission assessment workshop is one example of our administration's shifting perspective. The expense of sending so many to this meeting seemed huge to our dean and president, but they recognized that the cost was small compared to the price of another stalled assessment initiative. Designed to give participants time and resources to develop an action plan specific to our institution, the workshop was very beneficial. Our team developed a realistic plan to begin our cultural shift, and all ten participants, some of whom had had little understanding of assessment, became vocal supporters.

☐ **Shifting Faculty Thinking**

For example, one long-time faculty member reported on his conversion experience, saying that he reached his epiphany when he realized the importance of assessment in helping his students learn—the very reason he had dedicated thirty years of his life to teaching. In general, we have found that faculty members who have experienced the power of assessment to improve student learning are committed to assessment.

We are trying to recreate this faculty member's experience. Past assessment efforts were hindered not only by a lack of time and money but also by the faculty assumption that assessment meant more work. Rather than presenting assessment as a responsibility that requires a large time commitment, faculty now are encouraged to start small. Complex pre- and post-assessments requiring a lengthy rubric and multiple evaluators are out. Gathering data at one or two points through course-embedded assessments is in. The idea is that once faculty members have small, personal successes with assessment and improved student learning, they will have the motivation and confidence to use assessment more extensively.

Starting small also gives the faculty flexibility. When designing our current program, the faculty assessment committee kept the rules simple and straightforward. We asked each faculty member to identify one or two learning objectives per course, design an assessment, and report the data and changes made based on the findings. Biannual reports to the committee are the only external verifications and paperwork. While the committee may make suggestions, we see ourselves as facilitators, not policymakers or the accountability police. This non-punitive and hands-off approach is intended to place power and responsibility in the hands of faculty so they may develop assessments that work for their disciplines and unique classroom environments. It also gives the faculty room to experiment and perhaps fail. Our classrooms provide students with a safe place to experiment, risk, and, therefore, learn. We wish to provide the same environment for faculty to learn about student learning.

In general, we have found framing assessment in terms of student learning rather than in terms of external accreditation to be a natural way to engage faculty. Of course, is it more efficient to simply tell faculty members that they must assess if they want to keep their jobs, and there may be situations that require such coercion. On a large scale, however, tough talk has failed at Bethany. We are now allowing people to change their own minds.

☐ **Developing a Common Vocabulary**

Assuming a constructivist perspective, culture is built out of cooperative efforts to create shared meaning. At Bethany, we quickly realized that the strange and sometimes inconsistent language of assessment confused us. What is a mission statement? Are learning objectives and standards the same thing? For the first year of our renewed effort, on-campus training focused heavily on developing Bethany's answers to these questions.

Training and development also helped faculty members see the place of assessment within their accepted cultural roles. As a college that trains so many public school educators, for example, is it not our responsibility to model concern for student learning? The casual ethnographer who listens to formal and informal faculty discussions on our campus will detect the change. Less often do we talk about the struggles of teaching. We now hear more talk about supporting student learning.

☐ Developing Institutional Practices that Assume Assessment

Since creating common definitions of what assessment is and how and why we do it at Bethany, this year we have begun to reshape our institutional practices to integrate assessment into our decision-making system. Our AAHE-Higher Learning Commission team recognized that Bethany's past efforts failed largely because assessment was tied to an individual. When the inspired faculty member or administrator left the college, so did all energy for implementing assessment. To incorporate assessment into the Bethany culture, we recognized that assessment would need to be bigger than any one person. It would have to be as big as Bethany itself.

Early in 2002–2003, faculty approved a catalog statement affirming our commitment to using assessment to improve student learning. We are also changing the college's syllabus standard to include a statement of learning objectives and assessments included in the course. We see these highly visible symbolic changes as important to our cultural shift.

Our ultimate goal is to use assessment to guide all curricular decisions, including what courses to add or subtract, what academic majors to develop or remove, and what courses to require for general education. For this to happen, assessment cannot be relegated to one committee. In our utopia, there will be no place for a stand-alone assessment committee or even an assessment coordinator. Instead, all divisions, all faculty committees, and the faculty at large will use student learning as their ultimate criterion.

Future Directions and Possibilities

For the most cynical on our campus, assessment is still a hoop through which an outside agency is forcing us to jump. Thankfully, these individuals are now at the borders of our culture. More and more, our cultural center is defined by those of us who assume that assessment is part of what it means to be a teacher in the same way that preparing syllabi and grading are things that we do. More to the point, Bethany is developing institutional processes and cultural assumptions that will ensure that assessment continues no matter which individuals stay or leave.

References

LexisNexis Academic Universe. Wallerstedt Learning Center, Lindsborg, KS. 13 Jan. 03. Available at ‹http://web.lexis-nexis.com/universe/›.

Zhao, Yilu. More small colleges dropping out. *The New York Times* 7 May 2002: A28.

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Employee Development to Campus Development: Captain Assessment to the Rescue

J. Janelle Masters and Jane M. Schreck

Introduction

Passions run high over the assessment movement, and they should. Assessment is important. Colleges and universities have a lot at stake in the success of their assessment programs. But more importantly, assessment can be powerful, harnessing energy, creative thinking, and information to improve student learning and otherwise accomplish good things.

This article explores some of the challenges and opportunities that our assessment committee encountered in trying to maintain the viability and validity of the course-embedded element of our assessment program while at the same time orchestrating the expansions and refinements we planned for the program. Combining a clear focus on improved student learning with representation from across campus, we have been able to meet challenges and opportunities with creativity and a spirit of possibility best personified in our signature superhero, Captain Assessment.

We hope to offer examples and experience that may be instructive and useful to institutions confronting similar situations. Just as importantly, we hope to encourage institutions to bring a powerful new vision to their assessment programs and discover the potential for accomplishing good things throughout their institutions.

Background

Bismarck State College (BSC) is a two-year community college in Bismarck, North Dakota. We have a growing enrollment of nearly 3,200 students both online and on-ground. Thirty to 40 percent of our students are in job-readiness programs, working on requirements for a certificate, diploma, or associate of applied science degree. The rest are in a curriculum that would prepare them to transfer to a four-year institution. All of our programs require some general education credits.

In the last few years, we have become a Learning First College. This means we have reorganized the way we do everything into a system that puts the emphasis on learning. All faculty and staff are distributed among six Learning First teams, each responsible for different aspects of running the college.

Over the last several years, BSC has developed a program for the assessment of student academic achievement based on course-embedded assessment and four-point primary traits analysis scales. While we had faculty input on the program at every step of the process, some faculty still resist the implementation of the program. Some of the disciplines have been using a consistent system for several semesters, and some for less than that. Still, most faculty members are familiar with the program and use it with some consistency. Many of our vocational and technical programs long ago established assessment processes based on industry exams and certifications or that were otherwise driven by the industry. The assessment program helped systematize these results and report the data from the various programs in a consistent format.

In October 2001 we hosted a Higher Learning Commission site visit team. The team was charged with evaluating our program for the assessment of student academic achievement, our distance education program, and the process we used to determine which courses were considered general education credit. Concerning our assessment program, the team was satisfied with what we were doing with course-embedded assessment and with plans for refinement and expansion. They want to receive a report on our progress in implementing the plan as we had outlined it.

Our plans were to refine our course-embedded assessment and expand the assessment program, most notably in the area of broad-based assessment. We also recognized that we would have a challenge keeping the faculty interested and serious about their course-

embedded assessment efforts. Along with fostering a generally positive attitude toward assessment among the faculty, we wanted to make our students more aware of the assessment program. Finally, we had the ongoing challenge implicit in any assessment program: to continue to use the results to improve student learning.

We expected to experience a bit of a letdown after the preparation for and excitement of the site visit, and the assessment committee was looking for ways to keep the campus aware of assessment and prevent any lapsing into indifference.

Superheroes, and Super Powers, and Super Parodies

Dealing with the threat of indifference from the faculty and unawareness or apathy from students and staff was a job for a superhero. Enter Captain Assessment, complete with a cape, a cowl, and the amazing Binder of Power Assessment Handbook. Through a series of elaborate and imaginative comic strips in the student newspaper, Captain Assessment brought both humor and visibility to the assessment program at BSC. The comic strips, which combined digital photography and graphics, highlighted various aspects of assessment, creating a general impression of both playfulness and effectiveness. The comic strips also actively engaged the student newspaper staff and gave assessment broad visibility among students, faculty, and staff.

The comic strips were able to clarify some aspects of the assessment program and blunt some thorny issues on campus, while also providing subtle and off-beat humor. Some of the negativity associated with assessment was dispelled through the strip. It also provided an opportunity to feature aspects of campus that can be overlooked or taken for granted. Some of our administrators, too often perceived as staid or unapproachable, appeared in the comics. The president herself figured prominently in one strip, gaining the ability to fly through the powers of assessment!

One of the strangely encouraging signs that told us we were increasing the visibility and understanding of assessment on our campus came in an e-mail message from the Learning First team charged with building community. The message invited staff and faculty to one of the team's monthly social gatherings, which was billed as The Assessment RnR. The tongue-in-cheek invitation included a parody of a four-point primary traits analysis scale, one that could be used to assess participation in campus social gatherings. Since it is hard to parody the unfamiliar, we on the assessment committee chose to see the invitation as an indication that assessment had entered into our campus culture to such an extent that it could be a springboard for humor.

New Challenges and Inadvertent Benefits

Is there any force more difficult to thwart than the inertia of "We've always done it this way"? This was the next challenge for the assessment committee. We needed to overthrow a tradition, and still we dared to hope that those involved would see the change as an improvement. This escapade required ingenuity, determination, daring—and clipboards. But people generally agreed the results were worth it.

Traditionally, BSC has set aside a day for employee development, a day when classes do not meet, during which the staff and faculty mingle socially as well as attend workshops together for increased camaraderie and professional development. In spring 2002 the assessment committee decided that it would be a good idea to include assessment activities in employee development day. At the same time the state mandated giving a standardized student satisfaction survey to the student body, and our stated goal was 100 percent completion. Talk shifted to the best way to accomplish this task. Additionally, a common and annual complaint among faculty and student services was the dearth of faculty adviser-advisee interaction; there did not seem to be any time set aside for advising activities, and many students planned their schedules alone, often making errors that delayed their graduations.

After much discussion, it was decided that employee development day on Monday, October 21, would be transformed to campus development day on Wednesday, October 23, a strange new hybrid event for students, faculty, and staff. The morning would be used for students to meet in a group with their advisers. It was conceived as a time for general advising information, assessment awareness, and the administration of the student satisfaction survey. The afternoon would be the time when all employees would meet together off campus for social and professional activities. Furthermore, by working with the learning innovations team (the Learning First team charged with planning employee development day), we arranged to have assessment be the topic of the keynote address in the afternoon, as well as one of the breakout session choices.

Transforming employee development day to campus development day took massive planning. At first it was thought that the plan was logistically impossible, that there simply was not enough space on campus to gather more than 3,000 students together. We weren't even sure we had enough rooms for all of our advisers.

Lists of advisers, advisees, and classrooms were gathered and scrutinized. A walking tour of the campus, complete with clipboards, verified that we had more than enough classrooms for advisers, but that the seating capacity in most rooms wouldn't accommodate

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all the advisees at once. Two sessions were planned, with half the advisees at 9:00 A.M. and the other half at 10:15. The logistics of the adviser-advisee sessions were worked out with only a couple members of the faculty being displaced from their regular rooms. The Learning Innovations team drew up lists of talking points to assist advisers during the sessions. With all this preparation, we felt that the advising sessions could work as long as we could get the students to come.

Students were used to having this day off. We expected confusion, and we expected resistance. We needed a plan startling in its irregularity, personal in its appeal, and seductive in its bribery. We decided to produce a letter to each advisee and to have the students individually pick up their letters in the library.

One intrepid and trustworthy work-study student was given the daunting task of typing advisers' letters to all students. Fortunately, he was armed with the super power of mail merge. The letters gave the time and place for the advising session and promised incentives for attending: students would each receive three discount coupons to the bookstore, and their names would be entered into drawings for a free faculty-staff parking pass and a $200 gift certificate to use in the bookstore for textbooks.

The letters were placed at the front desk of the library under the names of advisers and were handed out by the library staff. Each students needed to know his or her adviser's name or could look it up on a list posted in the hallway. Two weeks ahead of campus development day, students were reminded by instructors to pick up their letters and come to the advising sessions. The letters that weren't picked up were mailed to students. To further promote the event, posters were developed, reminding students to come and promoting assessment in general.

Some administrators were sourly predicting a 30 percent turnout; some cockeyed optimists were hoping for 75 percent. Considering that there were no direct consequences for not attending and that about 20 percent of our students are part-time, many taking only evening classes, most people seemed satisfied that over 50 percent of students attended their advising sessions.

Campus development day provided several expected benefits beyond those directly related to assessment. Not only did we feel like we had made a very good effort in complying with the survey mandate, but we also felt that the morning had helped to strengthen the adviser/advisee relationship--some students learned their advisers' names for the first time. We had advanced the cause of assessment in the morning with the students and in the afternoon with faculty and staff. Furthermore, the promotional posters were displayed all over campus for days ahead of the event, reinforcing assessment issues for faculty, staff, and students.

There were also several unexpected benefits. Going to the library and being handed their letters by a real, live librarian can only serve to make students more likely to come to the library again. Also, the bookstore has enjoyed increased traffic since students received their discount coupons.

Beyond that, we had turned the battleship of tradition, transforming employee development day to campus development day with barely a ripple. In the evaluation surveys filled out by employees after campus development day, most agreed that half a day of development activities seemed like enough. Of course, improvements were suggested, but faculty members were almost unanimous in their approval of the concept of advising sessions, and many staff members seemed to appreciate a morning to catch up on work out of the routine of a regular school day.

Unexpected Treasures Discovered While Exploring Other Stuff

One of the important expansions of our assessment program was to develop valid, broad-based measures for assessing our students' learning in the general education curriculum. One of the things that seemed important in assessing the effectiveness of our general education curriculum was to determine how well students are able to apply what they learn. While course-embedded assessment has many advantages, experience and anecdotal evidence about students unable to write in biology, speak in history, or interpret data in sociology suggested that assessing skills in the courses in which they are taught might not be the most valid way of measuring what our students are learning. How well students performed in a composition class, for example, was not necessarily a valid indication of how well they would be able to write outside of that class. We were seeking a valid, feasible way of assessing knowledge and skills in courses outside their discipline.

Among the ideas that we explored were capstone courses and cross-disciplinary learning communities. Capstone courses seemed like a natural opportunity to gather assessment data on students' ability to pull together and apply what they have learned; however, no capstone courses existed in our general education curriculum or in the expectations of our students. As noted earlier, students might be working on a certificate, a diploma, or an associate of applied science degree through our job-readiness curricula or an associate of arts or associate of science degree in our transfer curricula. General education requirements vary from four semester hours for a certificate to nine for a diploma, fifteen for an AAS, and thirty-six for an AA or AS. Given this variety of possible profiles in general education enrollment, implementing appropriate capstone courses did not seem feasible.

Cross-disciplinary learning communities seemed more workable, and also advantageous for reasons beyond the assessment program. These learning communities have developed in a couple of different ways on our campus. For some, we yoke two or three courses together, and students enroll in some or all of the particular sections of those courses, knowing that there will be a built-in cohort of students and shared material and discussion among the courses. The courses are still separate and still maintain the common course numbering and credits of our system, but they are linked by theme and enrollment, creating a learning community. The other form of cross-disciplinary course that has developed on our campus is a general education course for particular kinds of majors, specifically a speech course for science majors.

While the assessment committee and some administrators continue to encourage the development of these cross-disciplinary opportunities for students, they haven't yet become a significant enough part of the campus culture, with students or with faculty, to provide valid data for broad-based assessment.

Still, these learning communities are worthy of mention because they are an example of the unexpected treasures that can be unearthed when on a quest for something else. Even if we are not yet able to make use of these courses for broad-based assessment, they are a positive educational opportunity for students and faculty alike, and their development is being encouraged and promoted.

Making Assessment a Way of Life

The quest for a valid method of broad-based assessment of our general education curriculum continued. Simultaneously, experience taught us that some refining and revising of our general education objectives was needed to make them more easily assessable. We had been working with ten general education objectives for a number of years. These were developed in conjunction with a rewrite of our college's philosophy and mission statements. Most of the ten objectives had specific subpoints; some objectives were still ill-defined. The assessment committee took on the task of examining these objectives to ensure that they were all assessable and were truly being assessed.

This revision process turned out to be grueling, exhausting, surprising, and finally rewarding. At one stage in the process, the ten main objectives became forty-two assessable subpoints. Further examination allowed for some sensible combining and eliminating. The ten main objectives remain, but for the purposes of assessment we now have twenty-four assessable points or intended outcomes within them.

One weekend, the assessment coordinator for our college—a poet by training and an administrator by experience—was struggling to pull together a workable proposal for broad-based assessment of general education. The assessment committee was scheduled to meet on Monday, and she wanted to have a proposal to consider at the meeting. She was working at her dining room table—soothed by Gregorio Allegri's "Miserere mei, Deus" on the stereo; intrigued with the majesty of the "V" of Canadian geese flying overhead outside her window; comparing and synthesizing various tomes on assessment; balancing and integrating our college's particular needs, hopes, and constraints—when it struck her: "This is general education." Art, science, geometry, reading, writing, critical thinking, problem solving, research skills, evaluation—even acknowledgement of diversity—at that moment, she was making use of it all.

Education has to do more than teach students to write in a writing class and manipulate numbers in a math class. Education has to enable students to learn when and how to use their knowledge and skills effectively in any situations in which they find themselves. Because of that, valid assessment programs have to do more than assess writing in a writing class and math in a math class. They have to be cross-disciplinary; they have to be systematic; and they have to be systemic.

The result of her insight that morning was the spark of an idea that was brought to the assessment committee that Monday and eventually turned into our four-year plan for broad-based assessment of general education. This is a plan that combines standardized testing, program assessment, cross-discipline assessment, and many of the processes we have learned through course-embedded assessment. It sets the assessment activities up on a rotation that ensures that each of the twenty-four assessable points will be assessed on a periodic basis. It spreads the assessment workload among the disciplines and faculty groups. It uses multiple measures. And, finally, it has a significant cross-disciplinary element.

Summary

For those who think the drama of this case study is overstated, we'd like to declare that assessment should be an adventure. It's easy to become bogged down in the paperwork and negativity that can surround assessment programs on college campuses. We hope our story can inspire those involved with assessment to bring a new spirit of creativity and possibility to their efforts. What superhero would help reanimate an assessment program that may be stalled from neglect or familiarity? What super powers are needed to subdue the forces of evil bent on foiling assessment on your campus?

Our experience tells us that assessment programs that remain focused on improving student learning while also staying open to challenges throughout the institution can accomplish a great deal and benefit the institution in unexpected ways, using their super powers for good—the good of improving student learning.

To paraphrase another superhero, **L**earning, **T**eaching, and the **A**ssessment **W**ay!

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Creating a Culture of Assessment: Empowering Faculty to Access Assessment Data

Susan Hatfield and Theresa Waterbury

While many institutions have developed processes and procedures to implement assessment activities on their campuses, few have evolved to the point where they have created—almost ten years into the initiative—a culture of assessment.

What's taking so long?

Perhaps one of the issues significantly inhibiting the creation of a culture of assessment is the "path of least resistance" approach adopted by many administrations in order to implement assessment on their campuses. Recognizing that they had fallen behind in the implementation strategies set forth in the assessment plan submitted to the Higher Learning Commission back in the mid 1990s, campuses scrambled to catch up as their reaccreditation visits approached. Low-impact assessment strategies were implemented, essentially urging faculty and staff to "Just Do It"—do anything—to appease the Higher Learning Commission and the site visit team. The implicit agreement was that as soon as the team left, faculty could return to business as usual.

This "Let's Make a Deal" approach generated data for the self study and resource room, though it usually resulted in follow-up reports and focus visits on assessment.

Winona State University (WSU) has adopted a culture-building approach to our assessment initiative. WSU was aware that building a culture would be a time-consuming evolutionary process, but the eventual result would be one that would create a long-lasting commitment to assessment.

Our early efforts to create a culture of assessment were through education and incentives. Educating faculty and staff created a common language from which to discuss and debate. Financial incentives were given to the departments and programs that volunteered to be early adopters. While both of these strategies began to establish the foundation of an assessment culture, it wasn't until we empowered faculty to access data in real time through the development of a Web interface to our database that they really began to understand and embrace assessment.

As in most colleges and universities across the country, Winona State's assessment activities were severely limited by the inability to efficiently and effectively store and access data. Data were stored in collection silos, with a separate silo for each type of data (student survey data, financial aid data, admission data, student records). These silos were located in different offices throughout the campus (admissions, registrar, housing, and academic affairs) and had no interconnectivity as each database came online at a different time and without universal data collection standards. Compounding the problem was that in many cases data dictionaries were nonexistent and data definitions resided only in the minds of those few who had actually entered the data. The result was that much of the existing data was uninterpretable (except by a few individuals who knew what the data elements represented), and could not be linked together. The ability to explore relationships was, for all practical purposes, impossible.

An improved technological infrastructure was required. The rationale was multifold. First, creating a structure—as opposed to a procedure—would be more likely to have a long-lasting impact on campus and really move us toward the creation of a culture of assessment. We knew that we could quickly and easily design assessment procedures that might be impressive to a site visit team whose members were not very astute in assessment, but procedures alone would not have the cultural impact as a structure for data collection and analysis. Secondly, a solid technological infrastructure would move some assessment activities away from the department level to the university level, allowing departments to focus on student learning issues. Measuring issues such as study habits and student satisfaction and many indirect measures of student learning can be easily done on the university level, freeing the departments to focus their energies on direct measures of student learning. Third, a smartly designed technological infrastructure would position us to respond to relevant questions for either a traditional reaccreditation self-study or, should we choose, an AQIP portfolio. Finally, the creation of a robust technological infrastructure would allow faculty and staff to see assessment in action, and thus would create a sense of understanding, interest, ownership, and investment in assessment.

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The technological infrastructure that we created with the assistance of a U.S. Department of Education Title III Strengthening Institutions grant consisted of an integrated database and four software applications—a student information tool, a faculty information tool, an ad hoc query tool, and a report tool. The first three applications are not assessment tools but information tools, as they query existing university records. We began with their development in order to have faculty and staff become familiar with the software by providing them direct access to the kind of database information that they would routinely request from the institutional research office. These applications were first introduced to office managers and administrative assistants, who offered invaluable assistance in their development.

The report tool application, completed and introduced to the campus in August 2002, allows secure access to student self-report survey data (behavioral and observational) from our Web-based student survey modules. These survey modules, completed by students every spring as part of our assessment day activities, consist of a series of question modules related to individual behaviors (social behaviors, study habits), background, perceptions (quality of instruction, campus climate), and satisfaction. When students log in to the assessment Web page, they access specific modules depending upon the number of credits they have earned, their major, and their home campus. In addition to the university wide survey modules, several departments and programs have included questions specifically designed and delivered only to their majors. As a result, a second-semester sophomore nursing major would receive a different set of survey modules than a second-semester junior biology major.

The reporting tool also allows access to department learning outcome data, which are also included in the database. For instance, if a department is using a standardized test as a learning outcome measure, those scores can be entered into the system and are available to be accessed along with the student self-report data. These self-report data provide faculty with a context in which to understand outcome data, adding life and meaning to a set of results. For example, a list of test scores on the CAAP exam becomes more interesting if analyzed in relation to how the scores of first-generation students compared to the scores of students for whom higher education has been a family tradition.

Unlike the other applications we developed, which report line-item data, the reporting tool reports aggregate data for the user-specified population. Controls are in place to protect student anonymity. Specifically, if the population or comparison group selected contains fewer than five students, data are not returned. This prevents the identification of individual students by gender, race, and age.

The reporting tool allows the user to identify a specific population (by year, college, department, or campus) to be studied. Following the identification of the population, the user identifies the process (self-report) module or outcome module as the object of analysis. As data only have meaning in relation to other information, system users have the opportunity to identify two levels of comparative variables, including background and demographic information. As such, the user may wish to compare study habits for upper-division students to those of lower-division students for each of the past three years. Or they may investigate whether female students who study more than fifteen hours per week perform better on an outcome measure than males who study less. Users can also identify up to four aggregate numbers to be reported for each response quadrant, choosing from the number in each response quadrant, column percent, row percent, total percent, or mean of ACT of the population that reported in that category. This allows for a single report to contain a significant amount of data for the users in their investigation of their research question. While not proving causality, the report does allow for the investigation of correlations between processes and perceptions and learning outcomes, providing for richer interpretation possibilities than would be possible from studying process or results data in isolation.

Faculty and staff training on the report tool began in late August 2002. Since then, more than 150 faculty and staff members have participated in the training and are regular users of the system.

We have some observations about how the reporting tool has assisted in developing a culture of assessment.

1. Once faculty members learn how to access the report tool, they are asking increasingly complex questions related to our students' learning.
2. Faculty members are starting to recognize the importance of sample size and are strongly encouraging—in many cases, requiring—students to participate in assessment activities.
3. More departments are providing outcome data for inclusion in the database because they want to be able to analyze the data using the online report tool.

Our report tool has played a critical role in further developing Winona State's culture of assessment. Enabling faculty to access assessment data in an easy, convenient, and intuitive way has promoted their interest, understanding, investment, and ownership of assessment.

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Engaged Learner and Assessment: A Faculty-Student Shared Responsibility

Jian R. Sun and Greg Miller

Introduction

Student outcome assessment is no longer a strange concept to institutions of higher education. The initial discussion on assessment in NCA's 1989 documentation has prompted significant institutional changes in awareness, attitudes, practices, policymaking, implementation, and institutional structures. What we perceive to be significant in this movement to make assessment an integral part of an institution's mission is how assessment is being implemented at different levels. We are moving from viewing faculty and students as two separate entities with different responsibilities in the assessment process, to engaging faculty and students as a unified entity responsible for: designing the process, generating assessment content, assessing the collected data, and interpreting and analyzing the information.

This paper provides information that can help address four basic questions:

1. What does "engaging learners" mean relative to assessment?
2. What is the role of faculty in this engagement of learners?
3. How can this engagement be reflected in the design, implementation, and interpretation of assessment activities and subsequent results?
4. What are some difficulties and challenges?

In this report we provide a description of the assessment component that is being modified to emphasize the design of assessment activities. We want to generate meaningful assessment information at three levels: course, program, and institution. We need to make the linkage between the pedagogy and practice for the teaching and learning process. We believe that there should be continuous discussions of rationale behind such modifications, advancing current levels of understanding assessment.

Discussion

The main thesis for this report is that assessment should be viewed as a shared responsibility between faculty and students. Our thesis is supported in each of the following three broad domains:

- Teaching philosophy/pedagogy concerning the role of the learner and the role of the teacher in the teaching and learning process
- Best practices addressing the relationship between assessment and teaching and between assessment and learning
- External expectations from professional, state, regional, and national accrediting organizations

Significant amounts of literature on teaching and learning have touched upon the roles of the learner and the teacher, describing them as complementing each other (Dawson, 1997), in terms of the learning styles that learners adopt or adapt (Erwin, 1991; Gardner, 1993), the teaching practice by the teachers (Miller, Imrie, & Cox, 1998), the discipline characteristics that may impact the teaching style (Huber & Morreale, 2002), the delivery methods used (Brooks & Brooks, 2001), and the evaluation theories of learning (National Academy of Sciences, 2001).

Best practices in assessment, guided by those various pedagogical implications, have been providing more and more information. This information focuses on the two types of relationships in assessment and teaching and learning, as is best described in the

"assessment triangle" concept discussed in a recent report by the National Academy of Sciences (2001). This report details three key elements underlying assessment; "a model of student cognition and learning in the domain, a set of beliefs about the kinds of observations that will provide evidence of students' competencies, and an interpretation process for making sense of the evidence" (p. 44).

It is now hardly deniable that external expectations of various constituencies have played a significant role in providing both pressure and guidelines in requiring institutions of higher education to more actively engage the learner in the process of assessing the learning outcomes. Such pressures and guidelines have resulted in knowledge and understanding of how students learn, how teaching can become effective, and how learning can be assessed. This knowledge and understanding leads to new domains, as illustrated in published documentation from regional accrediting bodies, such as the Higher Learning Commission's "Levels of Implementation" (2002a) and recently proposed "New Criteria for Accreditation" (2002b).

Those new domains have created fields where "men and women...actually practice a domain's procedures" (Gardner et al., 2001, 24). Professionals have been trained to work specifically on those tasks within a field (assessment of learning) for a common purpose. Here is the important point for the field of assessment of learning! Students should serve one of three major roles (in addition to elite gatekeepers and expert practitioners). Unfortunately, this point remains unrecognized by many assessment practitioners. Students are involved in only a limited way in the assessment process. This limited involvement can easily jeopardize the desirable outcomes of assessing student learning by creating "misalignment between a domain and a field" (Gardner et al., 2001, 30). The need to maintain the alignment has become essential, as can be seen in the two Higher Learning Commission publications mentioned. The emphasis in doing assessment of student learning while actively engaging the learners, throughout their learning process, further manifests the newly raised issue of the importance of involving the learners at a higher level of learner engagement in assessment.

To what extent can this learner engagement in assessment be defined and/or understood? Past and current practices seem to suggest several levels of engagement. Creating awareness of assessment in students through publicly articulated statements of assessment activities to be completed by students serves as one level. Students should receive information about assessment at the outset of the learning process. The role of the faculty is to educate students about assessment. At this level, the education of students about assessment is important, and it is referred to as being important for the *institutional culture* (Higher Learning Commission, 2002a).

At another level, learner representation in many of those assessment organizations is encouraged, and the learners are constantly motivated to perform required assessment activities (whose format and content are pre-decided and pre-designed by faculty, not by students) by taking various tests, responding to surveys, and completing activities and projects intended to generate assessment data to be analyzed and assessed by faculty. The faculty's role can be found in the faculty's efforts to embed assessment in their course assignments. At this level, the learners are the sole providers of raw assessment data, to be interpreted and analyzed by others. This level describes part of the *shared responsibility* (Higher Learning Commission, 2002a) with students in the assessment process.

What is advocated in this presentation is yet another level, where the learners are given the charge of selecting and presenting the content of their learning outcome evidence, and assessing such evidence, to demonstrate their learning outcomes. With the help of the faculty, students are offered the opportunity to select samples of their documented learning and provide their own assessment information. Faculty members serve as facilitators and engage the students, during the assessment process in each course, in both selecting and assessing their learning samples. In this process students are maximally engaged in the assessment process through a redefined division of labor for assessment, referred to as *maturing stages of continuous improvement* in sharing responsibilities with students (Higher Learning Commission, 2002a).

Those three levels of engagement seem to characterize the multiple roles of the students as "information receivers," "passive providers of assessment data," and "active assessors of their own learning." Those three levels characterize the faculty as "mere providers of assessment information," "reinforcers of assessment activities," and "facilitators in the assessment process and product."

Assessment as a Shared Responsibility

A student's role in the assessment process should go beyond the standard student representation on campus assessment committees. It should go beyond being informed of assessment purposes. As stated in the recently proposed "New Criteria for Accreditation," one of the three primary elements of effective learning environments should be engaged learners. What has been taking place in our graduate program is a continuous and progressively challenging faculty discussion on how to maximally engage learners in assessing their learning. From its inception our program was dedicated to seeking ways by which students could demonstrate genuine understanding resulting in functional knowledge. We expect students to maintain journals that document reflective thinking on personal, pedagogical, and philosophical levels. We expect classes to culminate in personal performances by each student to demonstrate genuine understanding.

To place our graduate program in alignment with the concepts of truly incorporating assessment in the teaching and learning process, it has been decided that the way assessment is performed should be modified. Learner engagement, therefore, is becoming a starting

foundation for us to reexamine our assessment practice as designed, implemented, interpreted, and utilized. The product from such conversations among faculty in our graduate program is to be shared below.

Student electronic portfolios, as a learner-engaged approach to assessment, share the following characteristics:

- **Its purpose:** To provide evidence of student learning and to provide opportunities for recognizing needed program improvements.
- **Its format:** Electronic portfolio.
- **Its three content components:**
  1. Component One (**Introduction**): Serves as an introduction to each student's portfolio, where the student can include biographical information (name, work, career, and other relevant information of his or her choice).
  2. Component Two (**Self-reflection/evaluation**): Serves as self-reflection, where students provide a realistic assessment of their own learning based upon selected coursework relative to the program goals and objectives. This is the most important manifestation of students' learning that will be evaluated by faculty from the program as well as by outside evaluators.
  3. Component Three (**Documented evidence of learning**): A collection of student coursework (activities, assignment, projects, writing, etc.) that provides evidence of student learning. When students complete all required work in each course, one or more work examples will be submitted after being evaluated by the course instructor and archived into a database. Students will have access to all the archived coursework they have submitted, and will compose their self-assessment piece of writing for the completion of the portfolio.

     This documented evidence of learning, from the course archives, will be inserted into the final portfolio, along with the introduction and self-reflection/evaluation.

     Four types of course documentations are to be included:

     - Effect on me (to be written at the entry, middle, and exit points)
     - Effect on my teaching (addressing issues in pedagogy)
     - Effect on my students' learning (manifesting how knowledge and skills learned are applied)
     - My content knowledge (demonstrating content mastery)
- **Two portfolio evaluations:**
  - **Internal evaluation:** Faculty from the program will evaluate randomly selected portfolios to assess how well the program goals are met through students' work.
  - **External evaluation:** Outside evaluators will be invited to evaluate randomly selected portfolios to assess how well the program goals are met through students' work.
- **Evaluation criteria/rubric:** A set of criteria, to be developed and shared with all faculty and students, will serve as the basis for portfolio evaluation. The evaluation will focus on the second component (self-reflection/evaluation) of the portfolio. The third component of the portfolio is consulted by the evaluators only when they wish to confirm or verify their analysis and evaluation of Component Two. This method of primarily evaluating Component Two in the portfolio serves several purposes:
  - Each student bears the main responsibility of producing and presenting evidence of his or her learning in constructing the self-reflection/evaluation piece.
  - Each student needs to understand the relationship between Component Two and Component Three. A deep understanding and analysis of his or her coursework should lead to a well-thought-out self-reflection/evaluation.
  - There is a difference between indicating the completion of coursework and producing and presenting evidence of learning.
  - Assessment is not something new or added on, but is an integral part of the teaching and learning process.
- **Dissemination:** Three basic uses:
  - Serves as a capstone of student learning to collect and summarize the learning experience.
  - Provides a primary source of documentation of student learning.
  - Offers a showcase of students' graduate educational experience and ability.

From the descriptions and discussions presented so far, the first three questions raised earlier have been answered—namely, true learner engagement should refer to such engagement at a higher level, as is clearly described in the "Levels of Implementation," with the faculty serving as active facilitators, helping and guiding the learners in this engagement in various phrases (design, implementation, and interpretations) of the assessment process. While trying to maximally utilize the assessment information for multiple purposes (generating assessment at course level, program level, and institutional level), faculty would need to be aware of, and prepared for, possible trade-offs in designing such assessment. Theories and practice have demonstrated that "the more purposes a single assessment aims to serve, the more each purpose will be compromised" (National Academy of Sciences, 2001, 225), and faculty are being challenged to explore more ways of balancing the relationship between the desire to design assessment activities for multiple purposes and "designing multiple assessment activities to provide the various types of information required at different levels of the educational system" (National Academy of Sciences, 2001, 225).

At the local level within our program, specific challenges confronting our faculty are providing appropriate faculty development, creating better systems to connect the learners in the program for their engagement, strengthening the current mentoring system, collecting and analyzing the data generated from the portfolios, utilizing such information to improve teaching and learning, and reassessing the proposed portfolio assessment design and practice.

References

Brooks, J. G., and M. G. Brooks. 2001. *In search of understanding the case for constructivist classrooms*. Upper Saddle River, NJ: Merrill/Prentice Hall.

Dawson, J. D. 1997. Relations of mutual trust and objects of common interest. In J. K. Roth, ed., *Inspiring teaching*. Bolton, MA: Anker Publishing Company.

Erwin, T. D. 1991. *Assessing student learning and development*. San Francisco: Jossey-Bass.

Gardner, H. 1993. *Multiple intelligences: The theory in practice*. New York: Basic Books.

Gardner, H., M. Csikszentmihalyi, and W. Damon. 2001. *Good work: When excellence and ethics meet*. New York: Basic Books.

Higher Learning Commission (HLC). 2002a. *Addendum to handbook of accreditation, 2d ed*. Chicago: HLC.

Higher Learning Commission. 2002b. Policy framework for the proposed new criteria for accreditation. Available from: ‹http://www.ncahigherlearningcommission.org/restructuring/newcriteria/NewCriteria.pdf›.

Huber, M. T., and S. P. Morreale, eds. 2002. *Disciplinary styles in the scholarship of teaching and learning*. Washington, DC: American Association for Higher Education.

Miller, A. H., B. W. Imrie, and K. Cox. 1998. *Student assessment in higher education: A handbook for assessing performance*. London: Kogan Page Limited.

National Academy of Sciences. 2001. *Knowing what students know: The science and design of educational assessment*. Washington, DC: National Academy of Sciences.

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From Crisis to Culture: Inspiring, Cultivating, and Guiding a Culture of Assessment

Rebecca Wojcik, Eric Martin, and Joyce Kennedy

Introduction

Like many schools, Governors State University (GSU) attempted to "do" assessment for many years without either taking the time or committing the resources to establish a culture of assessment. As a result, assessment was a top-down initiative that started, stopped, and restarted with each new administration. Many administrators, faculty, and staff now realize the importance of establishing a culture of assessment that weaves assessment and continuous quality improvement into the fabric of the institution so that each can be sustained and strengthened over time. Learning to overcome motivational and organizational barriers that often impede such work is important to developing a culture of assessment. As a result of numerous process enhancements and the central efforts of the university assessment committee (UAC), assessment is now a daily activity and ongoing priority.

Developmental Stages

To appreciate the emerging culture of assessment at GSU, it is helpful to review several key points in the recent history of the institution. In the early 1990s, assessment of student learning outcomes was conducted by faculty in a highly decentralized process with great variability of expertise and inconsistency. While several faculty members were involved in widely dispersed development of their individual expertise in assessment, including participation in developmental efforts at the national and regional level in the higher education community, most were underinformed, passive participants in assessment of student learning. Assessment activities were not well documented, and, at an institutional level, the scope of activities was difficult to discern.

This situation was largely a result of widespread administrative turnover throughout the decade, and it occasioned a focused visit by the North Central Association of Colleges and Schools (NCA) in 1997. During this visit, NCA expressed serious concern about the unevenness of outcomes assessment across programs as well as the lack of assessment documentation, particularly at the institutional level. Thus, it was widely anticipated that assessment would be a central consideration during the university's April 2000 reaccreditation visit. Yet the university's assessment efforts remained troubled between 1997 and 2000. In 1999, only a year prior to the visit, both the president and the provost resigned. The president had been with the institution for seven years, while the provost had been the sixth person to have occupied the office within nine years. What is more, it was revealed in August 1999 that the university's assessment committee—a group formed in response to the earlier focused visit—had not been meeting. Thus, the degree to which the university's assessment plan was being followed was unclear. Inside observers characterized the development of assessment at GSU throughout this period as episodic, driven in large part by external timelines and requirements. While overt faculty resistance to assessing student learning was negligible, collaborative faculty-to-faculty and faculty-to-administrator efforts were underdeveloped and at best isolated.

As the April 2000 NCA site visit approached, the interim provost reconvened the university assessment committee, but the new group had little understanding of its charge. The university's new director of writing across the curriculum, who reported to the provost, was included in this committee and facilitated the group's renewal and focus on development and documentation of assessment efforts. At the same time, GSU's board of trustees—a group that was also undergoing transformation during this period—mobilized in fall 1999 and quickly initiated a search for a new president. The search was concluded with the appointment of Stuart I. Fagan, the university's fourth president, on April 1, 2000, just twelve days before the NCA team's arrival.

As expected, the accreditation team identified outcomes assessment as a primary area of concern, although the team discovered that far more outcomes assessment was taking place in individual programs, divisions, and colleges than was being documented at the university level (a reflection of the widespread administrative turnover that characterized the period). After a careful review of the assessment processes within each of the university's four colleges, the team located GSU at Level 2 of the Levels of Implementation, and required a progress report on assessment in three years.

Process Enhancements

Through the subsequent stabilization of the administrative ranks as well as renewed awareness of the exemplary assessment work already taking place on campus, many process enhancements related to assessment have occurred at GSU since spring 2000. Perhaps the most important enhancement was the revision of the university's mission statement and strategic plan in 2000–2001. During the process of revising the mission statement and plan, the strategic planning committee, president, provost, and board of trustees endorsed movement of the institution to "demonstrable excellence" and continuous improvement. The president, particularly, has consistently echoed the message of quality academic programs.

Another process enhancement that has led to the recent success of assessment at GSU is the reactivation of the university assessment committee under the aegis of the provost. This appointed committee is a working group, and not exclusively a think tank. The efforts of the UAC have expanded in the past several years and are facilitated by the relatively small size of the institution's faculty and the spirit of collaboration that has developed between the provost's office, UAC, and the faculty at large. Unlike its predecessors, this revitalized committee has developed a mission statement and objectives for its work in addition to collaboratively creating a new model for assessment at GSU. Through retreats, brown-bag sessions with faculty, and monthly reports to the faculty senate, the UAC has fostered assessment dialogue on campus. The committee has successfully empowered programs by validating assessment activities, allowing greater flexibility in its expectations, and accepting reports on assessment that are couched in larger self-study documents prepared for specialized accreditations. The power of small groups working on idiosyncratic assessment issues has been harnessed effectively, resulting in a foregrounding of assessment and networking of ideas.

Timing and Resource Issues

In addition to the aforementioned improvements, several timing and resource issues appear to have contributed to the emergence of a culture of assessment at GSU. Throughout the later half of the 1990s, the university had an annual cycle of assessment in which reports were submitted to the office of the provost, but feedback on these documents was limited, if it occurred at all. The office was simply too short of staff and consistent leadership to respond. Moreover (and in large part due to staffing issues in the provost's office), the format of the reports was prescribed as a "one size will fit all," which further discouraged program assessment coordinators—faculty members charged with assessment in each unit—from completing materials and submitting them on time. Curiously, during this same period, adherence to the timelines and procedures established by external accrediting bodies (for programs that had them) was a high priority. However, because those timelines and procedures rarely paralleled those of the university's own assessment initiative, and because assessment was not central to most external self-study processes at the time, internal work on assessment was given minimal attention. Such timing issues forestalled the development of a culture of assessment throughout the decade. However, the university assessment committee's modification of timelines and formats to allow more flexibility and support for assessment as a cyclical, formative process instead of a time-driven process bearing all of the trappings of a summative evaluation has increased both the quantity and quality of responses from individual programs, divisions, and colleges. Timely administrative feedback as well as a concerted effort to synchronize external accreditation and program review processes have also contributed significantly to the emergence of a culture of assessment at GSU. (These will be discussed further in the next section.)

In addition to resolving significant timing issues, resource concerns are also now being addressed. The resources designated for assessment activities at GSU are housed in the individual programs, divisions, and colleges as well as in the central administration. The overall availability of resources is modest and generated exclusively through institutional funds that are sensitive to variability in state appropriations. Prior to 1999 no release time was provided to any faculty member to address assessment. The Center for Quality was established in 2001 to oversee university assessment in addition to coordinating GSU's program review process for the Illinois Board of Higher Education, assisting programs with specialized accreditation and licensure requirements, and guiding other university quality initiatives such as faculty development and writing across the curriculum. While the budget for this unit has remained flat, prior to the formal establishment of the center in 2001, the money was used almost exclusively to pay for the annual Productivity, Quality, Priorities (PQP) program—a negotiated and highly controversial faculty development activity that focused on generic topics. Although PQP remains a contractual obligation, the renewed stewardship of the quality budget has placed its focus on outcomes assessment and related quality initiatives. In addition to the purchase of books, subscriptions, and teleconference registrations, investment in faculty such as support for attendance and presentations at national, regional, and state assessment conferences has become standard procedure. Likewise, the Center for Quality has purchased assessment tracking software and now sponsors training sessions on this software in addition to the aforementioned events, ranging from full-day retreats to informal brown-bag meetings.

While the extrinsic rewards for faculty to assess student learning outcomes remain limited, the establishment of the Center for Quality and subsequent expenditure of resources to support assessment in sustainable ways has created positive change by illustrating the administration's commitment to assessment. This, in turn, has fed the faculty's intrinsic motivation to participate.

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Related Institutional Quality Processes

When the new university president and provost initiated a comprehensive review and subsequent revision of the university's mission statement and strategic plan only weeks after receiving reaccreditation from NCA in 2000, it became clear that a paradigm shift was underway. The goal of demonstrable excellence was quickly identified, and with it came a related commitment to continuous improvement. The Center for Quality promotes both concepts and works with faculty members and administrators to foster dialog throughout all assessment and self-study processes. The university assessment committee carries this same mantle. Throughout the prior decade, faculty at GSU were minimally responsive to outcomes assessment and viewed feedback as potentially judgmental and punitive. Today, thanks to the changes discussed throughout this essay, increasing numbers of administrators, faculty, staff, and students are aware that good assessment is formative and ongoing. When the university assessment committee and office of the provost (via the Center for Quality) began to offer feedback and encouragement on assessment activities as opposed to passing judgment, the momentum of faculty efforts increased. The work of assessment is now transparent, collegial, and ultimately useful.

Likewise, the university has benefited greatly from the aforementioned consolidation of timelines and processes imposed by external agencies. The assessment of student learning is now the linchpin for program review for the Illinois Board of Higher Education, regional accreditation through the Higher Learning Commission, and specialized accreditation achieved through nationally recognized agencies and institutions. GSU seeks to capitalize on this alignment and has developed a five-year cycle for program review that enables programs to utilize annual assessment findings and self-study documents for multiple purposes. The emphasis has shifted from how much assessment data can be amassed to how the data can be used most effectively. This review process has also been designed to empower programs that do not have specialized accreditation. As part of the new review process, programs in the liberal arts and sciences and professional programs are required to complete self-studies that include external peer review. To facilitate this process, a template, which mirrors the self-study processes completed by programs that have special accreditation, has been created. Outcomes assessment is the base upon which the template and the redesigned program review process are built. Programs that complete the process are not only validated through this new quality assurance, but they are also better positioned to acquire needed resources. Moreover, the new administration welcomes this "burden."

In the past two years, all of these processes have begun to work in concert with one another and have contributed significantly to the emergence of a culture of assessment at GSU. A final factor that has ensured the emergence of this culture is the recognition that people make assessment successful, and GSU is fortunate to have many hard-working faculty members and administrators who willingly serve on multiple committees to ensure the success of our collective assessment efforts. The stability of university assessment committee, academic program review committee, and university curriculum committee (to name only a few) has been remarkable in recent years. Moreover, the fact that the reporting lines for these committees have blurred may serve as the university's best evidence for its culture of assessment. For example, few on campus are aware that the university assessment committee is a provostial committee and not a faculty senate committee, as are the others listed above. This difference is unapparent largely because all of the aforementioned committees report at the monthly meetings of the faculty senate, and all share the same administrative liaison—the director of the Center for Quality. Such seamless integration has not only contributed significantly to the success of the individual committees, but it has also strengthened the overall culture of assessment on campus.

Future Issues and Opportunities

As at many public institutions throughout the country, budget cutbacks at GSU may create an uncertain future for assessment resources (e.g., travel to conferences, teleconferences, subscriptions). Internal funds may need to be reallocated, and competition for remaining resources may become intense. Depending upon the extent of the rescissions that may be necessary, large expenses such as the assessment software license may be reconsidered. In this impending era of fiscal austerity, there are those who predict, "No more teleconferences...just more (recycled) brown bags!"

Whatever the immediate challenge, the long-term goal for GSU is to keep the assessment conversation going through day-to-day assessment activities and by means of assessment and accreditation scholarship. Our faculty and administrators are striving to make GSU a recognized leader in assessment and accreditation processes. We pursue this lofty goal because we genuinely recognize the value of assessment. After a decade of assessment turmoil, in just two years the university has witnessed some of the many benefits of a coherent and consistent assessment initiative. In the long run, it is hoped that academic and support unit validation through assessment will boost enrollment, heighten alumni pride, and better enable GSU to remain attentive to the needs and interests of its working adult students who stand at the core of its mission. Quality issues are particularly important to this population, and the university feels an obligation to deliver the highest quality programs possible.

Demonstrable excellence and continuous improvement made possible through the assessment of student learning outcomes must survive and flourish in even the most difficult of times. At Governors State University, we believe that this tenet will not only help us cultivate a culture of assessment today, but will also guide that culture well into the future.

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Cultivating a Culture of Assessment of Student Learning at Rochester Community and Technical College

Tammy J. Lee and Anne M. Niccolai

Rochester Community and Technical College (RCTC) was created in 1915 and is the oldest community college in Minnesota. The college offers seventy technical and transfer programs and serves nearly 6,500 students in credit-based programs and 11,000 in workforce education offerings. Located at the University Center Rochester (UCR), RCTC collaborates with Winona State University and the University of Minnesota to offer learning opportunities from certificate to doctoral programs.

To guide the future design of RCTC, an innovative approach linking planning, quality, and accreditation was implemented. RCTC initiated a formal strategic planning process called Innovative Designs in March 1999 with the intent to connect strategic planning and the master academic plan with a Baldrige quality improvement process.

Three of the steps in the strategic planning and implementation process were

1. Realignment of the college mission and vision to position the college for the twenty-first century
2. Identification of design criteria and academic performance indicators to determine points of reference for assessing quality performance
3. Implementation of a comprehensive assessment of student learning initiative

Realignment of Mission and Vision

A major step in realignment included a review of college mission and the development of a vision statement that would position RCTC for the twenty-first century. Once established, the mission, vision, and belief statements were later used to support the identification of key performance indicators for academic program assessment. Only one change, the addition of "quality," was made to RCTC's current mission. It was added to communicate the college's commitment to continuous quality improvement.

RCTC Mission

Rochester Community and Technical College provides accessible, affordable quality educational opportunities to a diverse community.

Creating a vision that would position RCTC for the twenty-first century was the next stage in the planning process. RCTC had operated without a vision statement since the merger of Rochester Community College and Minnesota Riverland Technical College in 1996. Using the findings from an environmental scan, a task force developed a draft vision statement: "Rochester Community and Technical College will be a world class provider of liberal arts, technical, and life-long learning." This vision statement was communicated to all staff at a September 2000 staff development day. Faculty and staff were asked to define (in writing or pictures) what this vision statement looked like to them when achieved. Their involvement created a better understanding of the issues and challenges involved in a quality improvement process. It also enabled them to begin building a continuous improvement culture.

Identification of Design Criteria and Academic Performance Indicators

Another step in the planning phase involved the establishment of design criteria. The design criteria (aims or goals) are features that must be present within academic programs and departments in order to be responsive to the challenges and issues facing RCTC. They

served as the basis for the academic division analysis. The task force identified over a hundred design criteria. This list was later narrowed to eighteen through implementation of a nominal group brainstorming process. Faculty and staff further narrowed these criteria to three using a 10-4 quality-voting tool. Faculty and staff were asked to identify from the list of 18, those design criteria that "best" align with the future vision of RCTC. Using ten stickers, faculty could place a maximum of four stickers on any one criterion. The three RCTC design criteria resulting from implementation of quality processes and tools are as follows.

1. The mission and vision are modeled in the delivery and support of teaching and learning.
2. The college aligns resources to support the mission and vision.
3. The performance of the college demonstrates continuous improvement.

Upon development of the three design criteria, the college faculty began to identify key academic performance indicators to monitor their academic program's overall performance. To establish these performance indicators for each design criterion, rubrics were created. These key performance indicators provided faculty with a standard for identifying strengths and opportunities for improvement within their programs.

☐ **Performance Indicator Framework**

A rubric framework was developed to establish a common language around RCTC's three design criteria. Development of the key performance rubric framework involved RCTC's program and department chairs, faculty, and academic deans. Involvement of faculty enabled the faculty to direct their own performance process more consistently and effectively. It also created a better understanding of the issues and challenges involved in an assessment process.

Two staff development sessions in designing effective rubrics were conducted. The first session, "a chocolate tasting session model," provided general guidelines for rubric development and helped faculty understand rubric design. Faculty members were asked to develop a matrix or rubric that identified key performance indicators of a quality chocolate. A four-level rubric identifying characteristics at the exemplary, acceptable, improving, and not acceptable levels was developed. Faculty then tested their rubric assessment using various quality chocolate candies.

A second staff development session focused on identifying specific performance indicators and rating levels for each of the three design criteria. Once established, the rubric framework served in the process of self-examination by the college faculty to determine if their academic program aligned with the mission and design criteria of the college.

Implementation of Comprehensive Assessment of Student Learning Initiative

Following our accreditation site visit in spring 2002, it became apparent the college needed to develop a comprehensive assessment of student learning model and begin the implementation process as soon as possible. As an initial step toward that goal, a team of four attended the American Association of Higher Education (AAHE) Assessment Workshop. The workshop allowed the team the time to examine the college mission, vision, design criteria, and academic goals, and build a comprehensive assessment of student learning plan. The workshop was structured to facilitate an assessment plan that included goals, action steps, measures of attainment, and budget. Each team was assigned a mentor who guided them through the process, interactive learning sessions, best practice models, and work sessions. Focused time away from campus with wonderful resources allowed team members to develop a working document for future use. Draft plans were shared with all workshop attendees during the final workshop session.

As a college, workshop attendance put us on the road to implementation. Once back on campus, the team further defined the plan and added the budgetary component. Adding a budget allowed the college administration to begin to understand the commitment and focus that would be necessary to implement a comprehensive assessment of student learning plan. It also helped the college understand how assessment of student learning is related to institutional effectiveness.

Once a comprehensive assessment of student learning plan had been approved by college leadership and faculty, an evaluation of our current status was necessary. The college decided to adapt the levels of assessment developed by Cecilia López (Higher Learning Commission) to reflect RCTC's profile. Focus groups representing leadership, faculty, and students scored current level placement. The long-range plan includes annual evaluation of the levels of assessment to document future movement among the levels. This activity focuses future planning and development activities toward moving the college to level three (implementation).

An initial professional development forum included presentations by two colleges similar to RCTC that had mature assessment of student learning initiatives. One of the colleges utilized standardized tests to assess student learning, while the other used locally developed assessment measures. This experience allowed faculty and leadership the opportunity to evaluate two models and begin

to plan implementation activities within our institution. Both best practice colleges provided invaluable resources for future development on our campus.

Following the best practice showcase, a comprehensive assessment of student learning committee with faculty representation from multiple disciplines and leadership was cultivated. One of the primary goals of this committee was support of pilot projects within several general education disciplines. Committee involvement from general education faculty and leadership was critical to the success of the pilot projects. The thoughtful design of this committee allowed the college to gain the commitment of key faculty and academic leadership. This step was essential in the cultivation of a culture of assessment at RCTC.

During this time, the college had the opportunity to take part in a project being carried out by the system office at the state level. A data-tracking software program had been developed and was seeking pilot participants. Two college programs that were currently assessing student learning participated in piloting the software. The pilot project resulted in further development of the data-tracking software to meet the needs of occupational programs as well as general education disciplines.

A major focus of our 2002–2003 assessment of student learning plan was to give faculty time to explore assessment models and integrate successful practices into a general education pilot. To explore national best practice programs, six faculty members and one administrator attended the AAHE Assessment Conference in June 2002. The faculty members were assigned to complete a summary discussion worksheet intended to (1) list two examples from the conference that were effective in measuring general education competencies, (2) identify presenter(s) who could be considered for campus staff development days, and (3) brainstorm a list of theme ideas that would help communicate our assessment initiatives to faculty and staff. When asked to evaluate the AAHE national conference, the faculty members reported that they had a greater understanding of the depth of assessment across the country and their role in the multiple levels of assessment.

Following the AAHE Assessment Conference, summer pilot planning sessions were held over a three-day period. This provided faculty with time to reflect on what they learned at the conference and embed concepts into a general education assessment pilot for RCTC. Each discipline was given a planning template and asked to select one Minnesota Transfer Theme area to pilot, identify who would be assessed, determine the available data, identify additional data needed, identify the student learning assessment criteria and assessment tool to measure learning, and determine ways to use the data. Pilots were developed for the English, math, and science disciplines.

Building an understanding and awareness of our student learning assessment initiatives was key to achieving our goals. At our fall staff development day, information on the pilots was shared with all faculty and staff, followed by a stinger café session that engaged all programs and departments in identifying one student learning outcome that they would assess during fall semester. In addition, each member of the assessment of student learning committee was asked to work as a department/program in developing communication messages for one assigned month. The member responsibilities included

- Posting one student learning assessment highlight from their department/program on the RCTC assessment Web site ‹acd@roch.edu/asl›
- Publishing a brief summary of the student learning assessment highlight in the staff newsletter
- Writing a brief summary of an assessment book, video, or conference, and posting the summary on the RCTC assessment Web site
- Recording the minutes for one committee meeting and posting them on the Web site

Our future plans include assessing, analyzing, and adjusting our general education model based on the fall pilot results. A March 2003 staff development day is scheduled to bring in Peggy Maki, Director of the AAHE, to work with faculty to expand their work. We also plan to expand into the program areas and begin implementing a similar process that we used in developing our general education assessments. A team of program faculty will have opportunities to explore best practice models and summer planning time to develop pilots within their own programs.

While we have made progress on the road to a fully implemented student learning assessment program, much of the journey lies ahead. Our main goal is to keep faculty engaged and motivated while minimizing barriers to implementation. Feedback relating to our process has been positive. Additional faculty are stepping forward with fresh innovative ideas relating to assessment. We look forward to continued progress at our institution.

Gardening Tools Used for Cultivation

- Café-style discussion groups consist of small groups (four to six people) discussing a topic for a set amount of time and then moving to another group. Each table has an assigned person who stays at the location and records the essence of the

discussions. This style of discussion keeps dialogue moving, mixes up participants, and keeps one or two people from dominating the discussion for the entire time.

- The affinity diagram consists of ordering items through a nominal ranking system, and 10–4 voting gives each person the opportunity to assign ten votes using a maximum of four votes for one item. The following example illustrates how it was used in the development process of our college design criteria. People were given ten stickers and asked to vote for the design criterion that most reflected our college mission. They could place a maximum of four stickers next to one design criterion, and they had ten votes to assign. This activity was repeated for the design criterion that least reflected the mission. Following the 10–4 voting activity, an affinity diagram was constructed using the results. We then had a nominal ranking of our design criteria.

- Rubric development was incorporated into a professional development activity. A rubric development framework that could be adapted to a variety of situations was presented to faculty. Following the presentation, a group activity resulted in the development of a four-level rubric identifying characteristics at the exemplary, acceptable, improving, and not acceptable levels for chocolate. Faculty then tested their rubric to assess various qualities of chocolate and refined the criteria.

- The levels of assessment were developed by Cecilia López of the Higher Learning Commission. Colleges use them to chart their movement toward a fully implemented assessment of student learning initiative. The wording in the original document is generic so as to adapt to any institution of higher learning. We adapted the document to reflect intent for RCTC as a community and technical college focusing on occupational programs and transfer education. The adaptation included the use of terms consistent with other college documents and contained in the glossary of terms developed by the college.

The pilot process implemented by the RCTC assessment of student learning committee focused on a quality plan-do-check-act model. Faculty members were given time to (1) explore national best practice models, (2) develop a plan to integrate successful strategies into a pilot student learning assessment for their disciplines, (3) implement the pilot for one semester, (4) analyze the results of their pilots, and (5) make adjustments before implementing a campus-wide system.

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Assessment of Student Learning: Creating Change That Lasts

Patricia Dwyer

College Profile

Shepherd College is part of the public higher education system of West Virginia. Located in the historic eastern panhandle of West Virginia and perched on the Potomac River, the school attracts students primarily from West Virginia, Virginia, Maryland, Washington, D.C., and Pennsylvania. Approximately four thousand students are enrolled in 197 undergraduate majors, minors, and concentrations; the college also has a community college component and is currently developing selected graduate programs.

Assessment as Change Agent

In 1998, Shepherd College found itself in a predicament that many colleges and universities can relate to—slated for an accreditation visit in 2002, the campus assessment efforts had been stalled at every turn. A new director was assigned to lead the assessment efforts on campus, and a "formula" for assessment plans and reports was established. Over the last four years, however, the "formula" was transformed into a "vision," and the result was a campus-wide assessment program that effected dramatic changes in attitudes about assessment.

Harvard Business School professor John Kotter outlines an eight-stage process of creating major change in his book *Leading Change* (Harvard Business School Press, 1996). The eight-step process that Kotter identifies interfaces with the assessment process implemented on Shepherd's campus; this theoretical framework of effective change helps explain why the assessment process was successful and will provide a framework for other institutions establishing an assessment process.

John Kotter's Eight-Stage Process of Creating Major Change

(excerpted from *Leading Change*, 1996, Harvard Business School Press)

Step 1. Establishing a Sense of Urgency
- Examining the market and competitive realities
- Identifying and discussing crises, potential crises, or major opportunities

Step 2: Creating a Guiding Coalition
- Putting together a small group with enough power to lead the change
- Getting the group to work together as a team

Step 3: Developing a Vision and a Strategy
- Creating a vision to help direct the change effort
- Developing strategies for achieving that vision

Step 4: Communicating the Change Vision
- Using every vehicle possible to constantly communicate the change vision
- Having the guiding coalition model the behavior expected of employees

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Step 5: Empowering Broad-Based Action

- Getting rid of obstacles
- Changing systems or structures that undermine the change vision
- Encouraging risk taking and non-traditional ideas, activities, and actions

Step 6: Generating Short-Term Wins

- Planning for visible improvements in performance, or "wins"
- Creating those wins
- Visibly recognizing and rewarding people who made the wins possible

Step 7: Consolidating Gains and Producing More Change

- Using increased credibility to change all systems, structures, and policies that don't fit together and don't fit vision
- Hiring, promoting, and developing people who can implement the change vision
- Reinvigorating the process with new projects, themes, and change agents

Step 8: Anchoring New Approaches in the Culture

- Creating better performance through customer-oriented and productivity-oriented behavior
- Articulating the connections between new behaviors and organizational success
- Developing means to ensure leadership development and succession

Kotter's Eight Stages and Their Interface with Shepherd College's Assessment Process

Step 1. Establishing a Sense of Urgency

- Examining the market and competitive realities
- Identifying and discussing crises, potential crises, or major opportunities

Facing an accreditation visit was all the urgency we at Shepherd College needed. But the "major opportunities" cited in this stage can provide a more positive spin to the "urgency" that gets a campus to move forward with an assessment process. Some opportunities may include major curricular reform, a realignment of schools or programs, or outside funding for a particular project that demands assessment.

Step 2: Creating a Guiding Coalition

- Putting together a small group with enough power to lead the change
- Getting the group to work together like a team

Shepherd College had had a plethora of assessment committees but no action. When putting together a guiding coalition, the director invited selected faculty and staff members who would work well together and would be good ambassadors for the assessment program. In addition, the name change to "Assessment Task Force" contributed to the different tone that the group hoped to communicate. Unlike other committees that tend to be top-heavy with administrators, the task force had one dean who represented the other administrators. Staff, faculty, and—most importantly—students were invited to participate.

The task force met once a month and planned assessment workshops, helped departments construct assessment plans and reports, and generally offered assistance where needed.

Step 3: Developing a Vision and a Strategy

- Creating a vision to help direct the change effort
- Developing strategies for achieving that vision

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This step was perhaps the most important in the assessment process at Shepherd College. Our vision took the form of connecting assessment to improving student learning. That was the mantra whenever the director was discussing assessment issues with department chairs, faculty, staff, or students. The assessment office became "Assessment of Student Learning"—the administrative assistant answered the phone with that phrase, the office stationery communicated that message, and every newsletter and announcement always linked assessment and student learning. At the same time, the director proposed adding a statement to the institutional mission that would highlight the importance of improving student learning. The following was added to the college mission statement in 2000: "Student learning is central to the culture of ours and finding ways to improve student learning is a continuous process."

Strategies for achieving the vision included yearly assessment plans and reports from each department and unit. While this cycle demanded quick turnaround to complete the assessment loop, it also provided more immediate feedback (and deadlines) for departments that were starting assessment activities for the first time. In addition, departments identified three—and only three—learning goals to be assessed each year. This kept the process from seeming overwhelming, especially for beginners.

To support assessment efforts, the director invited each department to go off campus for an assessment retreat. The Office for Assessment of Student Learning made arrangements and paid for meals, and the director offered to facilitate a discussion with the department about program learning goals. Throughout the academic year, the director organized grassroots faculty development opportunities to continue educating the campus about assessment.

Step 4: Communicating the Change Vision

- Using every vehicle possible to constantly communicate the change vision
- Having the guiding coalition model the behavior expected of employees

The Office for Assessment of Student Learning communicated the vision in three key ways. A newsletter, "Assessment of Student Learning at Shepherd," showcased assessment's link to student learning. "Focus on Student Learning" featured faculty and staff as guest speakers who addressed topics of campus-wide interest, and a brown-bag lunch group, "Food for Thought," discussed issues of teaching and learning.

The guiding coalition, our Assessment Task Force, served as support for the campus, and in communicating with departments or individuals always linked assessment with student learning. The task force members reviewed yearly plans and gave feedback and advice about format. Thus, they made sure that each plan was linked to the mission, had three learning outcomes to be assessed, had two means of assessing each outcome (both direct and indirect), and had benchmarks to determine success. Task force members did not comment on the actual outcomes being assessed but gave feedback only on the components of a good plan.

Step 5: Empowering Broad-Based Action

- Getting rid of obstacles
- Changing systems or structures that undermine the change vision
- Encouraging risk taking and non-traditional ideas, activities, and actions

Getting rid of obstacles? Perhaps a more accurate description on our campus was working around the obstacles. For example, the director called her team a task force rather than a committee. This kept the group from stepping on the toes of already established assessment committees that didn't want to move the process forward. In addition, the task force was housed under strategic planning rather than the faculty senate, known for its propensity to stall or obfuscate important issues.

Early on in the assessment process, the task force wanted to encourage departments to assess those outcomes that would be more risky; in other words, departments should not assess only those outcomes that felt safe or were guaranteed to produce good numbers. Thus, the task force created a campus "philosophy of assessment" in which they asserted that assessment results would not be used for punitive purposes.

Initially, each department was automatically awarded $500 to defray the cost of assessment materials. At the end of the first year under the new director, very little of the money had been utilized; most departments did not have ideas, other than ordering tests, of how to use the funds. In the second year, the director shifted to mini-grant applications and encouraged departments to apply for projects. After the first year of awards, projects were advertised to the general campus population as a way to generate more ideas for using assessment funds.

Step 6: Generating Short-Term Wins

- Planning for visible improvements in performance, or "wins"

- Creating those wins
- Visibly recognizing and rewarding people who made the wins possible

Our wins in the first year were simply getting assessment plans and reports completed for each department/program. While they weren't perfect, the completion of the assessment loop gave departments some data to work with, and department members discovered that they could learn something valuable about their programs. As assessment cycles afforded more information to the departments, they were encouraged to use results in seeking budget increases.

We visibly recognized these wins by showcasing departments' assessment efforts in the newsletter or through the speaker series. In addition, we started a student achievement day; here students submit proposals to present projects or papers to the school community.

Step 7: Consolidating Gains and Producing More Change

- Using increased credibility to change all systems, structures, and policies that don't fit together and don't fit vision
- Hiring, promoting, and developing people who can implement the change vision
- Reinvigorating the process with new projects, themes, and change agents

In 2002, with four years of assessment data collected, our work was rewarded in several ways. We received a commendation on our assessment efforts from our Higher Learning Commission accreditation team. The college also restructured and created the position dean of teaching, learning, and instructional resources to expand on assessment activities and to develop a center for teaching and learning. New activities included student and faculty learning communities and a reinvigorated writing across the curriculum program.

Step 8: Anchoring New Approaches in the Culture

- Creating better performance through customer-oriented and productivity-oriented behavior
- Articulating the connections between new behaviors and organizational success
- Developing means to ensure leadership development and succession

Our better performance included changes in the curriculum, prompted by assessment, to better meet student needs. Organizational success in our accreditation visit contributed to making assessment more a part of the fabric of the institution. New leadership has emerged through the faculty learning communities, the in-house speaker series, and the interdisciplinary student learning communities that bring faculty together in teaching initiatives. A summer institute is planned for faculty to revise courses based on active learning strategies.

References

Kotter, John P. 1996. *Leading change*. Boston: Harvard Business School Press.

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Taking Assessment Off the Shelf: Developing a Public Culture of Assessment

Sandra S. Bowles and Alan R. Belcher

Overview

In the 1990s colleges across the country developed assessment plans to meet the requirements of accrediting agencies. Too often, when the visiting team left campus, the assessment plan was shelved. This case study examines how one institution has moved the total institution toward full implementation of its assessment plan and has made significant progress toward attaining Level III of the Assessment Matrix in two short years.

Background

In 1993–1994 the vice president for academic life at the University of Charleston appointed an ad hoc assessment committee charged with developing an assessment plan for the institution in preparation for a 1994–1995 NCA visit. The committee worked diligently to inventory assessment activities over the campus and prepared a plan that stood the test of approval from the visiting team and the Commission. Everyone breathed a sigh of relief, and the assessment plan was filed in the library and on committee shelves, where it did little more than collect dust. This scenario is probably not too unlike what has happened on many college campuses.

What Changed?

In fall 1995, the faculty passed the following motion: "The faculty commits to developing an educational system which encompasses the concepts of an outcomes-based program with comprehensive and continuous assessment of learning." This was followed with the creation of faculty roundtable groups charged with developing a set of liberal learning outcomes that would replace the general education requirements used by the institution for many, many years. Faculty members worked diligently to sift competencies in six categories—citizenship, communication, creativity, critical thinking, ethical practice, and science. For each category the roundtables identified competencies that would be required of each baccalaureate graduate of the University of Charleston.

Liberal learning outcomes (LLOs) are defined as the knowledge and skills one needs to live a productive and meaningful life in the twenty-first century. The LLOs program at the University of Charleston is designed to provide experiences that enable students to develop skills, adopt values, and acquire knowledge that will promote their achievement of worthy personal and social goals in the context of a rapidly changing society. LLOs are not limited to the presentation of factual knowledge. Students must be able to control knowledge: to produce, organize, communicate, and use it. Writing and problem solving (including analysis, synthesis, analogy, and metaphor) are major elements of the program. A liberal education is one that enables students to evaluate the power and limitations of different intellectual, aesthetic, moral, and religious methods. This ability allows students to develop those personal qualities that promote productivity and satisfaction. Learning experiences at the university foster the development of the student's abilities to demonstrate mastery of the LLOs required of successful graduates. The experiences also reflect the university's mission, which is to "educate each student for a life of productive work, enlightened living and community involvement."

At the same time, the first-year curriculum underwent significant change. Content from courses traditionally required of freshmen was reorganized into three learning communities—science, social science, and humanities. First-year students also engage in an orientation to university and university experience and a residence-based living-learning community. Within these communities the foundational competencies associated with the liberal learning outcomes are integrated with content and knowledge competencies in science, social science, and humanities. These learning communities, the skill-building workshops that support the learning communities, and the mentoring program all comprise the initial college experience (ICE) program for incoming freshmen. Students

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earn academic credit when they demonstrate that they have learned the skill and/or knowledge associated with the outcome. Student mastery of the competencies is evidenced through a portfolio that can be evaluated at any time during the student's progression through the academic program.

Beyond the freshman year, the liberal learning outcomes are embedded within the content and evaluation of discipline-specific courses or courses from an elective or related field. Courses that have achieved roundtable approval for delivery of LLOs are designated as ICON or portfolio-bearing courses. Approved courses appear in the academic course schedule with an indicator (ICON) that indicates which outcome(s) the course can help students achieve. Students must demonstrate achievement of the specified LLOs for successful completion of the course. As an alternative to achievement of specific liberal learning outcomes, students may complete a series of portfolio-bearing courses and present a collection of their learning products to demonstrate achievement of an outcome. Portfolios are submitted periodically for assessment and feedback. A senior capstone course currently under development may offer opportunity for final fulfillment of LLOs. Assessment of student achievement is based on criteria established by the individual roundtables and made available to faculty.

To further complete the curricular requirements at the university, over the academic year 2001–2002 each program identified measurable learning outcomes that each student enrolled in the program must achieve to graduate.

Students at the university have the opportunity to move at their individual level of ability. Students are encouraged to work at their own pace and to avail themselves of the opportunity for "learning your way," which is the university's way of communicating that students may complete programs in less than four years or may extend the academic experience as needed.

Implications for Faculty

As one considers the several major changes that have been made in the organization and delivery of the curricula in this institution, it is readily apparent that the traditional approaches to course syllabi development, teaching, and assessment required a great deal of modification. To clearly identify course outcomes and appropriate assessment, it became necessary for faculty to redesign course syllabi, to clearly identify how each competency is assessed, and to identify the minimal standard required for the student to demonstrate achievement of the competency. It was painfully apparent that faculty needed to rethink their approach to teaching and the determination of student success. The whole process mandated that faculty become more knowledgeable and skilled in assessment of student learning. For the institution, this required a huge commitment to faculty development.

Raising Assessment Awareness

Engaging the institution and particularly the faculty in effective assessment has become a way of life for the University of Charleston. Through a variety of activities and initiatives, we have successfully raised institutional awareness of the value and processes of assessment. Throughout the process we have repeatedly stressed the need to keep it simple and to encourage university constituencies to collect data only if they can be used to improve teaching and learning or help the university achieve its mission. This emphasis has served us well in working with faculty, as it has helped take much of the mystique out of assessment as a basic essential to the buy-in and use of assessment principles. Over time we have managed to engage all constituencies of the university, albeit some more successfully than others. We have made great strides in promoting assessment as a part of the institutional culture.

What Did We Do?

1. **Promoted faculty buy-in**

   Prior to 2001 our faculty had limited expertise in working in an outcome-based curriculum and the requisite use of assessment. Faculty were somewhat resistant to change and encumbered with heavy workloads. Prior to this time there was no one in charge of assessment. A number of activities helped us work through these problems, including

   A. Workshops

      1. Using the Higher Learning Commission's "Levels of Implementation" as a framework for development of assessment across the institution
      2. Developing outcome-based programs
      3. Developing outcome-based courses

B. Use of consultants to assist faculty to develop assessment skills

1. Dr. Virginia Anderson presented multiple workshops and consultation on assessment and development of assessment tools
2. Dr. Charles Bonwell worked with faculty in teaching and assessing critical thinking.

C. Faculty encouraged to give and take

1. Presented in-house workshops
2. Presentations for faculty development
3. Faculty retreats to work on curricular development and assessment

D. Attendance at national conferences and workshops

1. AAHE attendance and presentations with groups of six to eight faculty members
2. Attendance at Higher Learning Commission Annual Meetings
3. AAC&U Institute on Sustainable Innovations
4. Team of ten faculty members to Alverno Institute

E. Institution of merit-based pay to reward faculty members who have actively engaged in curricular revision and implementation of effective assessment

F. Collaboration with other schools

1. Member of Appalachian College Association (ACA) sharing expertise and resources
2. West Virginia Independent College Enterprise

G. Regular periodic review of program strength and viability

1. Academic planning committee reviews academic programs every two years
2. Makes recommendations for program enhancement or closure

II. **Added an assessment committee to the standing committees of the university**

Prior to 2001 there was little or no leadership for assessment on the campus. The appointment of a coordinator of faculty development, part of the duties of the director of learning, assessment and technology, was a major step forward. This, in concert with the addition of an across-the-campus assessment committee, has been very effective.

A. Representation includes members from each of the liberal learning outcome roundtables, dean of student life, librarian, director of institutional research, the provost, students elected from SGA, and the director learning, assessment and technology (twelve members)

B. Committee oversees assessment and promotes development of "culture of assessment"

C. In 2001–2002 served as mentors to individual academic programs as each program developed program mission statements, outcomes, and appropriate assessment for each outcome. In fall 2002 these were evaluated by the committee, with feedback provided to each program.

D. Assessment committee's work made public

1. Monthly reports to university faculty, which include sharing of results from assessment instruments and surveys administered to students and faculty
2. Minutes online
3. Statement of philosophy of assessment in catalog
4. Currently developing Web-page
5. Will coordinate spring 2003 assessment showcase
6. Information shared with board of trustees through the academic life committee

III. **Obtained funding to support faculty development**

A supportive administration actively sought and obtained funding to provide necessary resources for faculty development and curricular revision. This has been an essential component of our success. The involvement of faculty in local and national workshops to develop expertise in curriculum and assessment could not have been accomplished without the availability of grant funding.

A. Major grants obtained from the Claude Worthington Benedum Foundation, Christian A. Johnson Endeavor Foundation, and the Independent College Enterprise

B. Grants used to provide a variety of initiatives, including

1. Faculty retreat
2. Workshop and conference attendance
3. Consultants
4. Funding for faculty mini-grants for curriculum development and the development of embedded and authentic assessment tools
5. Faculty participating in in-service provided stipends

Results/Benefits

While we have moved our campus to an outcome-based curriculum and made huge strides in developing and implementing our assessment plan, there have been other, serendipitous outcomes that have had what we consider to be positive outcomes, including

- The development of clearly stated outcomes for programs and individual courses, and outcomes that are connected to pedagogy and assessment
- Faculty focus has changed from teaching to learning and demonstrates an increased emphasis on personal excellence in teaching
- Faculty clearly see need to evaluate student achievement to support "learning your way"
- Proficiency in developing assessment techniques and assessing student academic achievement has been instrumental in improving program effectiveness
- Work of the assessment committee has resulted in greater interdisciplinary collaboration and improved working relationship among faculty members
- The linking of liberal learning outcomes and professional education provides a more "seamless" education
- Faculty members are excited about their work and willing to share

Remaining Challenges

While we have made significant progress in our efforts in curriculum development and assessment, we recognize that many ongoing challenges remain. Some of these include

- Obtaining additional funding for continued faculty development
- Orientation of new and adjunct faculty to outcomes-based curriculum and the importance of assessment
- Student appreciation of the assessment process and benefits offered them
- Continued development of authentic course-embedded assessment tools specific to our liberal learning outcomes
- Research in the use of assessment to improve teaching and learning
- Assimilation of transfer students into an outcome-based curriculum

Conclusion

The University of Charleston has moved to an outcome-based curriculum that demands assessment of student learning. We have made significant strides in engaging administration, faculty, and students in assessment. Focusing on faculty development and internally sharing expertise, we have successfully engaged faculty in assessment at levels far exceeding our expectations.

Change is never easy, and we have sometimes lost sight of what we are trying to accomplish because we have at times become bogged down in the details. However, faculty members at the University of Charleston are learning to challenge themselves and each other. They are learning to use assessment effectively, to find alternative ways of accomplishing goals, and to be certain that we are being true to our students and our mission. Even with the challenges of meeting internal and external demands on our time and energy, we are committed to continuing to evolve, purposefully and strategically, into our dream of a learner-centered institution. To this end we have encountered many challenges, but we have made significant progress toward taking assessment off the shelf, and we are willing to share our experience.

References

The Higher Learning Commission (HLC). 2000. Levels of implementation: Patterns of characteristics. *Addendum to the handbook of accreditation, 2d ed.* Chicago: HLC.

López, C. L. 2001. Using the levels of implementation to improve student learning. Paper presented at the Annual Meeting of the Higher Learning Commission, North Central Association of Colleges and Schools. Chicago, IL.

University of Charleston. *2002–2003 Academic catalog.* Charleston, WV: University of Charleston, pp. 44-46.

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Integrating Assessment into College Life: A Faculty-Driven Checklist of Strategies

Barbara Edwards, Vincent Holtmann, Kelley Raftery, and Brad Sparks

Introduction

How does outcomes assessment become integrated into the culture of an institution? The answer, it seems, is mostly by trial and error—and very slowly. A faculty member may have an idea that works with his or her students and may pass it on to a colleague. An administrator may bring back a suggestion from another institution, or an alumni member may attend an advisory board meeting and mention something that helped him or her succeed in the workplace. Over time techniques and ideas evolve, change, and are sometimes discarded, but some strategies are successful in fostering an assessment climate at the institution. This paper will review the techniques that have gradually caused a culture shift at Ranken Technical College, changing it from an institution that reluctantly complied with the Higher Learning Commission's outcomes assessment initiative to one that recognizes the significance of, and actively promotes, a continuous improvement process in student academic achievement.

Institutional Background

Ranken Technical College (RTC) is a private, non-profit institution of higher education that awards associate degrees in thirteen technical fields and a bachelor of science degree in architectural technology. Located in St. Louis, Missouri, it was founded in 1907 by David Ranken, Jr., and as a result of the ever-increasing complexity of technology and greater demands in the workplace, the college has continued to expand its curriculum and broaden its programs. Ranken offers a unique three-part educational formula that blends general education classes and technical education in theory and laboratory courses with a dedication to developing positive work ethic standards in students. In this role the college has always maintained close ties with the industries that hire Ranken graduates, and, as the college approaches its hundred-year anniversary, this philosophy continues to be a factor in the success of its graduates.

Outcomes Assessment History

In 1999, after a comprehensive institutional visit from the Higher Learning Commission in which the institution was granted continued accreditation with the next comprehensive evaluation in ten years, Ranken was challenged with a monitoring report on outcomes assessment. At that time the Higher Learning Commission felt that while the college had a long history of gathering and evaluating data about institutional effectiveness, its outcomes assessment plan was still in an "embryonic" state. The assessment leadership at the college realized that, while considerable effort had been made to improve student academic achievement during the previous years, it was crucial for assessment to become part of the college culture. A major shift would have to take place that would involve everyone in the college—and beyond—in the assessment process to make it a priority.

Until then, a small group of faculty had struggled with assessment issues with limited success. Departments had been required to write assessment plans without a real understanding of the underlying goal of improving student learning. Faculty viewed assessment as just one more task in their already busy schedules, and administrators viewed it as compliance rather than quality improvement. In an institution that prides itself on the work ethic and traditional values, the requirement of a monitoring report acted as a wake-up call indicating that the college was not performing at the highest possible standard. Those involved in assessment realized that improving the assessment program required buy-in from all constituents of the college. The challenge of a monitoring report acted as a catalyst to gain the necessary support that ultimately made this possible.

Over the next four years awareness of assessment expanded, and more people became actively involved in the process. Faculty became more willing to try new ideas. Strategies that proved successful fueled enthusiasm for further efforts. Those involved in assessment realized that strategies that are ongoing and, once established, self-perpetuating were most successful in developing an environment for growth in assessment. They also realized that the complexity of assessment could be reduced with a meaningful assessment plan and viable strategies to achieve goals. A review of the strategies that have reinforced assessment at the college targets four specific groups:

- Administration
- Faculty
- Students
- External constituents

The following discussion focuses on strategies that were developed by, and/or directed at, each group in turn.

☐ **Administration**

While most strategies for assessment were introduced and sustained by faculty, after the 1999 evaluation the administration of the college initiated a number of ideas that greatly facilitated and encouraged this process of assessment for the faculty. Upon the advice of the Higher Learning Commission, the administration provided a *central repository* for the mounting outcomes assessment data. Additionally, *clerical support* in the form of a staff member to maintain records, take committee meeting minutes, assemble documents, and do filing was approved. One faculty member was given *release time* to compile data and rewrite the outcomes assessment (OA) plan in conjunction with the outcomes assessment committee. Also, after tracking expenses for a year, the committee was given its own line-item *budget;* and assessment became embedded in the *planning process* of the institution by being tied into departmental budget requests. Proposed budget requests are directly linked to goals set by departments, which in turn affect student learning. These goals are reviewed annually and are now compared to outcomes assessment data. Additionally, outcomes assessment has been added to the annual faculty evaluation process. Reinforcement was also given to assessment efforts through the *acknowledgement of OA accomplishments on annual employee appreciation days*. Finally, an outcomes assessment session was formally added to the three-day *new faculty development seminar* presented semi-annually by the vice president for institutional advancement. Introducing new faculty to the role of assessment was felt to be an important step in furthering outcomes assessment at the college.

☐ **Faculty**

The basis for Ranken's assessment program is a strong *outcomes assessment committee* composed of faculty from all academic departments. However, prior to 1999, the committee was often less than successful in establishing a systematic program for measuring and improving student academic achievement at the college. At an institution steeped in tradition, major reasons for the committee's lack of success included faculty resistance to change and an increased workload. Administrative support has been partially responsible for increasing the committee's effectiveness, as has the fact that once instructors saw first-hand how meaningful feedback could improve student learning, they gradually became more enthusiastic about the assessment program. Meetings are held bi-weekly, and minutes are maintained in the central repository and on the college's intranet. Departments rotate members annually to give everyone a chance for direct participation. A number of faculty members feel that the increased communication between departments has been beneficial in determining how the curricula of related departments (for example control systems technology and industrial electricity/electronics technology) complement each other and/or fit together. Assessment leaders are also available to meet with departments individually to help with their individual assessment plans and with solutions to any problems. The committee generally sets annual goals and aims to provide a supportive environment for the practice of assessment, as well as a forum for assessment issues.

All academic departments at the college have developed individual outcomes assessment plans, along with a calendar of important assessment dates. Additionally, departments are asked to maintain all assessment data in a *departmental activity binder* that is updated on a regular basis. Information in the binders varies by department and may include student critiques, mission statements, recommendations for curricula and/or teaching changes, assessment criteria, forms, and department calendars. All binders must contain departmental assessment plans. To assist departments in compiling appropriate data, a number of forms have been created, notably a *use of outcomes assessment form* and an *annual report form*. These forms prompt departments for specific data and ask them to analyze their assessment efforts. Ultimately, all academic *departments are required to give an annual presentation to summarize their assessment activities and to present their binders* to the outcomes assessment committee. Instructors have found these sharing sessions helpful.

In addition to individual departmental plans, binders, and calendars, the outcomes assessment committee also maintains a *college-wide OA assessment calendar* (containing dates for advisory board meetings, department-wide assessments, and the like) and a *master outcomes assessment activity binder* that contains the *plan for outcomes assessment of student learning at*

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Ranken Technical College and the *outcomes assessment model.* The plan and model specify how assessment is tied to the mission of the college, set out specific goals of the program, and demonstrate how the circular process of assessment includes feedback loops to improve student learning. The ultimate goal is to transfer data from all of the binders into a recently created college-wide *outcomes assessment database* that is available on the institution's intranet. This database will eventually contain all assessment data at the college, thereby cutting down on paperwork and making assessment information easily accessible to all faculty.

While not conducted on a regular basis, *faculty development sessions* on assessment topics have been held numerous times. Sponsored by the outcomes assessment committee, these sessions initially assisted departments in developing their outcomes assessment plans. Since then several sessions have been held, the latest being a faculty presentation by OA leadership reviewing the assessment activities of the 2001–2002 academic year.

Another strategy that has been successful in fostering communication about outcomes assessment has been the publication of a newsletter for faculty dealing with OA issues, both internally and externally. The *OA Flash* is the work of two OA committee members who keep abreast of assessment activities in the college and who research interesting events at other institutions. The newsletter is issued several times during the academic year.

Staff are often conspicuously absent when dealing with outcomes assessment; however, some attempt has been made to inform them about the purpose and processes of assessment through the college's *employee orientation system.* All new faculty and staff are required to meet with administrators, staff department heads, and some academic department heads to become familiar with how the institution is run. A meeting with the chairperson of the outcomes assessment committee has been added to this procedure, and new employees also receive an *Outcomes Assessment Question and Answer brochure* to augment the information.

☐ **Students**

The goal in involving students in assessment is not necessarily their active participation in the process, but rather to help them understand how assessment affects them and improves their learning. To that end Ranken has taken some modest steps to give students this information. Strategies include a written *description of outcomes assessment in the student handbook* and regular *articles about assessment activities in the RTC student newspaper.* A more direct technique involves *participating in semi-annual spirit days* with an assessment information booth and an activity to arouse student interest, such as a raffle. A *display case* in a prominent location contains information about assessment and includes student projects and testing data. In the 2002–2003 academic year the faculty have also begun to include *statements about assessment in their syllabi,* and instructors are encouraged to address the topic in their orientation sessions. While further work needs to be done in this area, the changes have been moderately successful in giving students an appreciation of how assessment can improve student learning.

☐ **External Constituents**

Ranken Technical College has a long history of being connected to the industries that hire its students. Each department has an advisory board composed of recognized leaders in their field, and meetings are generally held two to six times a year. Advisory boards are an important means for technical departments to obtain feedback about the appropriateness of curriculum, new equipment, and industry trends. Additionally, the boards provide departments with up-to-date information on opportunities, product changes, and innovative techniques in their field. Several years ago *outcomes assessment issues were added to the agendas of the advisory boards* and, since board members are already committed to student academic achievement and often make curriculum suggestions, this has proved to be a useful technique.

Along with departmental advisory boards in the majors, Ranken has recently formed a *general education advisory board* that deals with general education outcomes and other issues. The committee originally began in 2001 as a focus group examining general education goals and outcomes for the college's first bachelor's program, approved by the Higher Learning Commission in 2002. Since then it has continued to meet on a more formalized basis, now with the addition of three external members from other institutions and industry. While other general education issues are discussed by the group, improving student learning continues to be the primary focus.

Another project undertaken by the outcomes assessment committee is the development of *surveys for two groups of external constituents, alumni and employers.* A subcommittee for each survey was charged with developing a brief questionnaire on student outcomes. The surveys were mailed for the first time in fall 2001 and met with limited success. As expected, some questions need revising to make them more specific, and the subcommittees are now preparing the surveys for a second round of mailing. The college plans to mail these on a rotating basis, and it is hoped that after a number of years the data will assist academic departments assess their outcomes.

The most successful strategy involving external constituents is undoubtedly the *Share and Compare Roundtable,* held for the first time in May 2002. Outcomes assessment committee members and directors from a number of area colleges and universities were invited to spend a day at Ranken discussing assessment issues. Six institutions participated in the event. The day featured a

loose agenda: a brief welcome speech, a tour, lunch, and mostly a lot of discussion and sharing of assessment issues, problems, and solutions. The roundtable was so successful that everyone who attended wanted to make this an annual event, and plans are underway for the next session. Perhaps the greatest benefit of the roundtable was the realization that other institutions are struggling with similar issues and that, while some have made greater progress, others are still focused on gaining faculty support and working on implementing assessment at their institutions.

Conclusion

While a lot has been accomplished in the last four years, outcomes assessment is still, and will continue to be, a work in progress. More work needs to be done on involving and informing students, developing a viable general studies outcomes assessment plan, and getting meaningful feedback from alumni and employers. Academic departments will need to cooperate and work with each other, and the college will continue to share with and learn from other institutions. In order to sustain itself, outcomes assessment will continue to grow, change, and hopefully improve in the years to come. Ranken Technical College feels that it can meet this challenge and successfully work at enhancing student academic achievement since the biggest obstacle has been overcome—that of integrating assessment into the life of the college.

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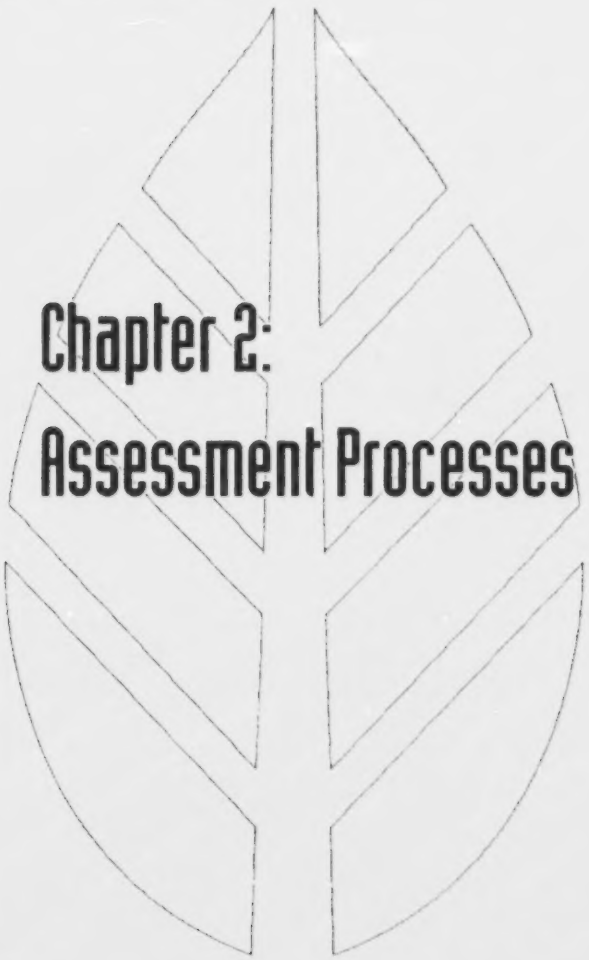

Chapter 2: Assessment Processes

The Higher Learning Commission
A Commission of the North Central Association of Colleges and Schools
NCA

Restructured Expectations: Building New Partnerships for Learning

Program of
The Higher Learning Commission

108th Annual Meeting of the North Central Association

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Assessing an Institution's Outcomes Assessment Efforts: The Application of the Higher Learning Commission Assessment Matrix by Three Institutions

Jessica L. Jonson, Julie Wallin, and Karla Sanders

Introduction

A successful outcomes assessment program requires a long-term view and commitment. Therefore, it is necessary to have a process in place that ensures progress toward those long-term goals. As coordinators for outcomes assessment efforts at the institutional level, we have struggled with how to assess the progress of outcomes assessment. This assessment of institutional progress is necessary for not only reporting to the Higher Learning Commission but also for ensuring that institutional assessment efforts have not stalled and determining how to further enhance those efforts. Specifically, the different kinds of issues we have encountered include the following.

- How can we ascertain whether the institution is making progress in its assessment of student learning?
- How can we effectively communicate the progress of our outcomes assessment efforts/effects with accrediting agencies?
- How can we assess assessment at the institutional level to model a "culture of evidence"?
- How can we analyze assessment reports received from individual units (college, academic departments, etc.) to better understand the contribution and progress of outcomes assessment at our institution?
- How can we draft an institutional report about outcomes assessment that is a critical analysis rather than a summary of activities?

In this session, three institutions will share how they have attempted to address these issues by using the Higher Learning Commission's *Assessment Matrix* (formerly known as the *Levels of Implementation*)[1] as a guide.

Background

The *Assessment Matrix* is an addendum to the Higher Learning Commission's *Handbook of Accreditation*. It was designed to "assist institutions in understanding and strengthening their programs for assessment." The matrix consists of two dimensions: three levels of implementation by four patterns of characteristics. The three levels of implementation are "Beginning Implementation of Assessment Programs," "Making Progress in Implementing Assessment Programs," and "Maturing Stages of Continuous Improvement." The four patterns are institutional culture, shared responsibility, institutional support, and efficacy of assessment. It is assumed that these patterns are dynamic and fluid across an institution and build upon one another. Institutional culture focuses on collective/shared values and mission. Institutional support involves the resources and administrative structures for the outcomes assessment process. Shared responsibility emphasizes the importance of assessment's being a faculty-owned process that involves students and has strong administrative support. Efficacy of assessment encompasses the totality of all assessment efforts. Within each pattern for each level of implementation, benchmark descriptors of progress allow for documentation of progress over time. These descriptors emerged from analysis of content found in team reports and therefore are to serve as descriptive rather than definitive "markers of the progress institutions have made in developing their assessment programs."

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For each of our three institutions, these levels aided in framing vital assessment characteristics. However, each institution identified how the *Assessment Matrix* could be applied given our unique campus cultures and the maturity of assessment efforts at each university. As the following three descriptions illustrate, each university applies the *Assessment Matrix* in ways most suitable for its culture and structure.

University of Nebraska-Lincoln

At the time the *Assessment Matrix* was first released in 2000, the University of Nebraska-Lincoln (UNL) had just completed a Higher Learning Commission institutional focus visit on assessment. Although the focus team members found that UNL had a strong structure and strong support for outcomes assessment, they requested a progress report in two years on how the assessment process was contributing to the improvement of student learning. Consequently, the fourth pattern of characteristics, efficacy of assessment, held particular interest for us.

Because UNL is a highly decentralized institution, most assessment efforts occur at the level of the academic unit. Thus, we needed to find a way to communicate our progress as a whole rather than through the great variety of differences that occurred across academic units. The descriptions for efficacy of assessment assisted us in moving toward this bigger picture, but we determined that we needed to identify an additional level of detail that would help us measure the extent to which we were achieving the characteristics described. Therefore, we applied the framework for efficacy of assessment by identifying seven indicators that paralleled the descriptions for this pattern of characteristics but also represented what our institution valued about outcomes assessment.

Once we had identified the seven indicators, UNL decided to capitalize on the wealth of information provided in annual assessment reports from academic units in a more formal and systematic way. Annual reports were a natural fit for use in collecting information about the seven indicators because as the reporting process evolved past mere development of outcomes assessment plans, we began to ask academic units to focus on two questions:

1. How has the outcomes assessment process and evidence informed decision making?
2. How has the outcomes assessment process led (or will lead) to the improvement of your educational program?

Therefore, the number and content of the annual reports were analyzed to collect information relevant to the seven indicators so that progress on each could be tracked for the institution as a whole.

For example, one characteristic for efficacy of assessment is increased engagement among academic units and faculty in the collection and use of assessment results. To assess our progress on this characteristic, we would review an academic unit's assessment report and make a determination about the extent of the impact of unit's outcomes assessment activities on its academic program(s). This impact is analyzed at four levels, representing increasing levels of engagement with the assessment process:

- Modification to assessment plans
- Discussion of programmatic issues highlighted by assessment activities
- Consideration of actions to improve student learning
- Actions taken to improve student learning

By annually determining the percentage of units engaged in the assessment process at each level, we could determine whether assessment efforts were increasing the level of contribution over time. It also allowed us to recognize the impact of initial assessment efforts, since much of what was learned in the beginning was about the assessment process itself.

By tracking information on these indicators each year, we obtained a sense of contributions made to outcomes assessment efforts and whether those contributions were increasing each year. We started tracking this information in 1999 and have used it to enhance communication about our progress internally through UNL's annual outcomes assessment reports and as external evidence for our Higher Learning Commission progress report due December 2002. Indirectly, the collection of information has assisted in clarifying expectations for assessment efforts and substantiating the contribution of outcomes assessment for those who question its value. The way we documented each of the seven indicators can be found in the appendices of the 2000 and 2001 annual assessment reports at ‹http://www.unl.edu/svcaa/priorities/assessment.html›.

Oklahoma State University

At Oklahoma State University (OSU), all academic programs are required by the state regents to have an outcomes assessment plan and to submit annual reports demonstrating their assessment efforts. The university's assessment office and faculty assessment

council guide university-level assessments and also provide information and financial resources to academic programs to assist in developing effective program-level outcomes assessment. After a flurry of outcomes assessment activity following the initial implementation of the Oklahoma State Regents for Higher Education Assessment Policy in 1993–1994, outcomes assessment in many programs slowed or stalled. A review of the outcomes assessment reports submitted by academic programs from 1995 through 1999 showed that effective outcomes assessment was inconsistent, or inconsistently reported, among academic programs, and only a handful of programs demonstrated the type of progress articulated in the Higher Learning Commission's *Assessment Matrix*.

Dissemination of the *Assessment Matrix* encouraged the OSU assessment council to undertake peer review of outcomes assessment and work toward helping programs meet outcomes assessment expectations. The *Assessment Matrix* provided a framework that the council used to develop its own scoring criteria appropriate for evaluating each academic unit's assessment documents (plans and annual reports) as well as for providing constructive feedback about areas for improvement. The *Assessment Matrix* also states that "coaching and facilitating" were expected of the faculty assessment committee, which added strength and momentum to the review process.

Every academic unit is reviewed every three years, and each review focuses on the program's assessment plan and annual reports. The assessment office and the assessment council conduct the outcomes reviews jointly. The assessment office coordinates the logistics of the process and summarizes results for each program while small teams of council members conduct the reviews. The review criteria do not directly use the language of the *Assessment Matrix* but are based on principles described in that document (e.g., articulation of assessable student learning outcomes, use of direct and indirect assessment methods, use of assessment results for program development). The reviews emphasize the importance of helpful and constructive feedback, and follow-up information is provided to programs that request assistance.

Reviews have been conducted since 2000, and the process has been successful in a number of ways. The reviews have provided a valuable opportunity for communicating basic assessment information and articulating what programs should be doing; faculty members relate that they appreciate the feedback. About 75 percent of programs have developed new assessment plans or demonstrated greater commitment to program outcomes assessment in their annual reports after the reviews began. The assessment council members themselves have become more aware of best practices in assessment, and the experience has enabled them to become more effective assessment leaders for our campus. Overall, the development of these reviews has been a critical step in moving the institution toward better assessment practices and improved assessment awareness.

Information related to this process (copies of the evaluation forms and results summaries) will be provided at the presentation and can be viewed at ‹www.okstate.edu/assess/council›.

Eastern Illinois University

Like the University of Nebraska-Lincoln and Oklahoma State University, Eastern Illinois University (EIU) found the *Assessment Matrix* particularly useful at the institutional level for identifying the progress of assessment efforts and for developing a shared language when reporting to internal and external constituencies. As our assessment efforts moved from assessment of general education, an institution-wide effort, to the program and departmental levels, we found that we could adapt the matrix for use at this more specific level. The matrix aided in cutting across discipline-specific barriers in order to develop a reporting process and feedback loop suitable for all academic departments and comprehensible by all constituencies.

Like many institutions, Eastern began its assessment efforts at the institutional level with a faculty committee focused on examining our mission and our general education to develop learning outcome goals for all our graduates. The impetus for this focus on assessment came from the 1995 "Report of a Visit to EIU" from the NCA team, who noted that "the campus has lost its early leadership edge and momentum in assessment activities. Specific steps must be taken to ensure full implementation of assessment plans with a clear focus on student learning outcomes."

Once an institution-wide assessment plan was established, it became clear that discussions similar to the ones that had taken place at the institution-level would be needed at the program level in order to encourage faculty to include assessment as part of the major and minor programs. Levels of implementation were varied by college and discipline. Support and development opportunities were needed to provide advice and a framework for faculty to organize, develop, and execute assessment plans based on student outcomes that could be embedded in established programs or used in the creation of new programs.

In academic year 1999–2000, academic departments were asked to complete departmental assessment summaries. These summaries ask department chairs or assessment coordinators/teams to complete the following five sections:

- Program (Major/ Minor/Concentration) Objectives
- Assessment Measures (who, what, where, and how assessed)

- Program Expectations for Students' Learning Objectives
- Results from the Current Academic Year
- Description of the Feedback Loop and How Results Will Be Used

All graduate and undergraduate programs at Eastern were required to submit a summary to the vice president for academic affairs. With a formal reporting structure in place, many departments were encouraged to create faculty-driven assessment committees or to turn to their departmental curriculum committees for discussions on major/minor objectives.

To help departments with this effort, the committee for the assessment of student learning (CASL) shared the *Assessment Matrix* with departments to encourage self-reflection, shared responsibility, and greater analysis at the department level about progress in assessing student learning outcomes. However, while CASL had found the matrix useful in creating a university-wide assessment plan, the departments experienced difficulties in adapting institutional criteria to their work at the major/minor levels. To aid in their assessment efforts, a form using primary trait analysis was developed for departments. This tool provided criteria by level, corresponding to the categories reported for departmental assessment reports. In turn, those categories corresponded to the steps to creating assessment plans and developing a culture of assessment. The assessment office provides feedback on a response form to each department on its summaries with advice on ways to improve efforts; this feedback includes information on where each department falls in terms of the levels of implementation. Copies of all these forms will be disseminated at the presentation and can be viewed at ‹http://www.eiu.edu/~assess/departmental_assessment_plans.htm›.

The response form encourages dialogue within departments as chairs, coordinators, and assessment committees share the feedback with the rest of the faculty. The format also increases communication between those charged with providing support for assessment efforts and the faculty who develop assessment objectives and measures for their students. While departments are still at varying levels of maturity in terms of assessing student learning outcomes, the information gleaned from the summaries offers the institution a way to monitor progress for its internal and external constituencies while also providing useful information that serves as an impetus to further discussion and shared responsibility and values.

Summation

The Higher Learning Commission *Assessment Matrix* has enhanced the development of effective assessment at all three institutions, yet interesting parallels and differences exist in our uses of the matrix. At each institution, the matrix was used to evaluate and enhance outcomes assessment reporting practices in academic units and make inferences about the overall status of outcomes assessment at the university level. The University of Nebraska-Lincoln assessment office employed matrix concepts to review departments' outcomes assessment reports and used the review results to evaluate the university-wide status of outcomes assessment. At Oklahoma State University, the assessment office and faculty assessment committee conducted similar reviews; these reviews also provided an overview of outcomes assessment at the university level, but the focus of the OSU reviews was to provide feedback at the department level. Eastern Illinois University started by using the matrix information to establish and assess outcomes assessment processes at the university level and then used this approach to guide outcomes assessment at the department level. To varying degrees, each institution uses criteria developed from the concepts in the *Assessment Matrix* to assess efforts at the department and university levels. Further, each institution employs the matrix as a tool to communicate assessment expectations to faculty and facilitate quality outcomes assessment.

Notes

[1] The Higher Learning Commission, "Chapter Reference A: Assessment of Student Academic Achievement: Levels of Implementation." Addendum to the Handbook of Accreditation, Second Edition. March 2001, updated March 2002.

[2] Ibid., p. 15.

[3] Ibid.

[4] Ibid., p. 25.

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Assessing Student Learning: Elegance in Simplicity

Gloria M. Rogers

Introduction

Faculty members are often thrust into the position of assessment coordinator or a similar position because they are exemplary teachers, have experience with statistics, education, or psychology, or just drew the short straw. However, they often do not have a mental model for how to create a systematic process for assessing student learning that is both efficient and effective. By developing a "lean and mean" systematic assessment process, the general workload on faculty can be reduced, the data will be more meaningful, and the resources required will be minimized.

Use Models

It is not necessary to start with a blank slate. Explore the models that have already been developed, and adapt those that are aligned with your institutional strengths as a beginning to the process. The AAHE *9 Principles of Good Practice for Assessing Student Learning* (AAHE) is a must-read for institutions that are serious about understanding and implementing a robust assessment process. The critical elements of any model begin with the institution's mission statement and include the development of measurable learning outcomes, curriculum mapping, assessment strategies, evaluation, and feedback loops. The development of a model that is unique to the campus will help focus efforts in a systematic way, being sure that each process has an "owner" and is attended to in a timely fashion.

Define the Terms

It is important to create a "discourse community" of assessment. This can be done by defining the terms that are going to be used throughout the process. Unfortunately, a standard language is not used in assessment and evaluation. To avoid confusion and reduce the language barrier, it is critical that each institution decide what terms are going to be used, publicize them, and use them consistently when referring to the various processes. Table 1 lists some of the most common terms that are used. (Rogers, 2002).

Table 1. Assessment Terminology

Terms	Definition	Some Other Terms for Same Concept
Objectives	Statements that describe the expected accomplishments of graduates during the first few years after graduation	Goals, outcomes
Outcomes	Statements that describe what students are expected to know and be able to do by the time of graduation	Objectives, standards, goals
Performance Indicators	Specific, measurable statements identifying the performance(s) required to meet the outcome; confirmable through evidence	Standards, criteria rubrics, specifications, metrics, outcomes
Assessment	Processes that identify, collect, use, and analyze data that can be used to evaluate achievement	Evaluation
Evaluation	Process of reviewing the results of data collection and analysis to make a determination of the value of findings and action to be taken	Assessment

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Clarify the Outcomes

One of the most common errors is to develop broadly stated learning outcomes statements without defining what the outcomes mean. The lack of definition makes meaningful data collection processes difficult, if not impossible. For example, a common learning outcome for an institution is in the area of ethics. Some institutions even state that they have a goal that their students will be "ethical." What does that mean, and how will you measure it? Another institution may have as a learning outcome that students should "understand their ethical responsibilities." What does this mean? What does "ethical responsibility" look like? How will students know when they have achieved "an understanding of their ethical responsibilities?" The learning outcome must be reduced to a manageable number of measurable performance indicators that will give focus to the assessment process and make it possible to measure and provide meaningful feedback to the institution on teaching strategies. For example, performance indicators for "ethical responsibilities" may be:

1. Students should know a professional code of ethics.
2. Students should be able to evaluate the ethical dimensions of a problem in their discipline

These indicators reflect different levels of cognition and can be measured. More importantly, both students and faculty have a common understanding of what performance is required to demonstrate the outcome. The assessment methods also become more apparent. With the first indicator, students will need to demonstrate that they "know" a code of ethics. This could be the code of ethics for their discipline or a general code of ethics. Faculty would be able to incorporate a learning experience in the major or general education curriculum that would provide students with an opportunity to learn and demonstrate their knowledge. The data could be collected in the context of the course and used for institutional assessment purposes. The second indicator is at a much higher level of cognition and implies that they not only know the code of ethics but that they are able to evaluate the dimensions of an ethical issue within their discipline, compare and contrast possible actions, and come up with a recommendation for action. Articulation of the performance indicator enables faculty to focus the learning experiences that will provide students with an opportunity to practice and demonstrate what they have learned from the code of ethics in a meaningful context.

Map the Curricula

Once the learning outcomes have been defined, it is important to understand how the curricula support or are "mapped" to the outcomes. There are at least three dimensions to the mapping process.

1. Is the outcome an explicit objective of a course?
2. Do students get an opportunity to demonstrate their competence related to the outcome in a particular course?
3. Do students get formal feedback on their performance on the outcome in a particular course?

An example of a curriculum map appears in Table 2 (Rose-Hulman, 2002). Mapping the curriculum provides rich data that will enable the institution to strategically focus assessment efforts. It will also reveal where there are weaknesses in the curriculum. Assuming that the learning outcomes are ones that all students should be able to demonstrate by the time of graduation, each student should have opportunities throughout the curriculum (including their major) to learn, practice, demonstrate, and get feedback on their learning. What can be revealed through mapping is that in some majors students are never provided an opportunity to demonstrate their competence on the outcomes in the context of their major discipline. The results also might reveal that the outcomes are only found in elective courses so that a student could go through the course of study without taking a course in which they could learn or demonstrate competence on a given outcome. This could be the result of the "everybody's job is nobody's job" effect. In many cases, just the process of mapping the curricula reveals a great deal about the need to align curricula to what the institution says is important about student learning.

Table 2. Curriculum Map.

Institutional Outcome	Objective Explicit	Demonstrate Competence	Formal Feedback	Not Covered
1. Recognition of ethical and professional responsibilities. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
2. An understanding of how contemporary issues shape and are shaped by mathematics, science, and engineering. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
3. An ability to recognize the role of professionals in the global society. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐

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Institutional Outcome	Objective Explicit	Demonstrate Competence	Formal Feedback	Not Covered
4. An ability to understand diverse cultural and humanistic traditions. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
5. An ability to work effectively in teams. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
6. An ability to communicate effectively in oral, written, graphical, and visual forms. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
7. An ability to apply the skills and knowledge necessary for mathematical, scientific, and engineering practices. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
8. An ability to interpret graphical, numerical, and textual data. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
9. An ability to design and conduct experiments. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐
10. An ability to design a product or process to satisfy a client's needs subject to constraints. View *indicators* or make a *comment* (optional)	☐ Yes	☐ Yes	☐ Yes	☐

Develop a Timeline

Faculty members are busy and have a very long list of important things that they want to accomplish. Assessing institutional learning for the purpose of institutional improvement is on the list, but not very close to the top. Caution must be taken not to develop an assessment system that will be so vast that it will collapse under its own weight. It is important to remember that data do not need to be collected on every student for every outcome every year. Develop a realistic time-frame where you focus on only a few (two to four) outcomes a year. The number will depend on how many outcomes you have and your "accountability cycle." That is, what is the time span between reporting cycles to external agencies as well as internal accountability processes? For example, if you have nine outcomes, you may choose to focus on only three per year and have a three-year cycle of assessment. If you find that you consistently do well on one or more of the outcomes, you may decide to skip those and assess others more frequently while making improvements in the curricula. Remember, this process must work for you, not for an external agency. You should be able to make modifications and multiple iterations in the process as needed. The important thing is that your decisions are evidence-based.

Summary

The key to efficient and effective assessment processes is to keep it simple but not simplistic. Don't try to measure too much too often, making the process too hard. You may have twenty-five things you think all students should know or be able to do by the time they graduate, but they cannot all be equally important. After you have made a decision about the subset that you are going to measure, you may find that as you consistently do well on some, you may want to stop assessing those and tackle others of importance. Everyone agrees that faculty members need to be involved in this process, but it is unrealistic to think that they will tolerate a system that requires them to alter their view of what it means to be a faculty member. Developing an effective and efficient system will invite them into the process and serve institutional needs as well.

References

Astin, Alexander W., et al. 2003. Assessment forum: Nine principles of good practice for assessing student learning. American Association for Higher Education. Available from http://www.aahe.org/assessment/principl.htm.

Rogers, Gloria. 2002. The language of assessment. Communications Link, *ABET Quarterly News Source* Summer: 6.

Rose-Hulman Institute of Technology. 2001. *Curriculum map*. Commission on Assessment of Student Outcomes.

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Ensuring the Assessment Investment Pays Off: A Case Study

Andrea Greene, Gail Mee, and Gayla Preisser

The Assessment Problem: Some Background

> What do students actually learn across their several years of higher education?... Given all the assessment activity of the past decade...what are we now able to report from systematic assessment evidence about students' cumulative gains in learning across their years of study? The answer remains ...much too little." (Schneider, 2002)

Marchese (2000) poses several problems associated with the assessment movement, among them that assessment goes against the grain of academic culture; faculty perceive that outside entities want to "get the goods" on them; assessment practice is perceived as soft and lacking in scientific rigor; and the questions of assessment are not only uninteresting, but are dangerous. According to Marchese, these factors are not just problems, but "pathologies" plaguing the assessment movement. No wonder colleges and universities are having trouble developing and launching successful assessment initiatives; no wonder we still know much too little.

At Mesa Community College (MCC), over the past eight years, the faculty and administration have made a significant investment in meeting the considerable challenges of the assessment problem by developing a credible program to assess student learning outcomes. As a result of these efforts, MCC is one of few colleges nationally that can answer the question, "What do students actually learn here?" Assessment results over time show clear evidence of student learning in the college's general education and career and technical programs. These results also reveal areas for improvement that are used by faculty, departments, and the college as a whole. Using Mesa Community College as a case study, this paper addresses how colleges can invest their financial and human resources to ensure their student assessment programs are credible and sustainable and, most important, that results are used by the faculty to improve teaching and learning.

MCC's Assessment Program: An Overview

The Mesa Community College program to assess student learning outcomes is a college-wide initiative designed to measure and document the degree to which students attain specific learning outcomes valued and defined by faculty. The program is the result of a close collaboration among faculty, administration, and staff and has been recognized nationally for use of good assessment practices. Student assessment at MCC has become a cornerstone of the academic program and is an important part of evaluating the overall effectiveness of the college in achieving its mission.

The college's first assessment plan was written in 1994. Since that time, the program has evolved through numerous phases of development, implementation, and refinement. The phases include development of student learning outcomes; design, pilot testing, and revision of assessment tools, procedures, and data collection methods; and, most recently, a strong focus on the use of assessment results. Student learning outcomes are assessed for general education and in career and technical programs.

Through the use of a cross-sectional research design, the performance of samples of students who are beginning programs of study in general education and career/technical programs is compared to the performance of students completing those programs. Assessment data are collected once annually during a spring assessment week. Through a randomization process, each student in the sample completes only one of several assessment measures.

Faculty members use the results of student outcomes assessment to identify and document strengths in college programs, identify areas for program improvement, and ultimately improve student learning. Dissemination of assessment results and integration of results into departmental and college planning have become increasingly important as the program matures.

The assessment structure at Mesa is highly collaborative, with faculty, administration, and staff working together to continuously improve, sustain, and institutionalize the assessment program. The faculty senate student outcomes committee (SOC) is a standing faculty committee charged with making decisions and recommendations related to all aspects of student outcomes assessment at the college. The committee is comprised of more than twenty full-time faculty and four ex-officio members (the dean of instruction and staff

from the office of research and planning). Full-time residential faculty members receive reassigned time in the fall and spring semesters to serve as chair and chair-elect of the SOC and to lead the assessment initiative.

What We're Learning About Student Learning: The Results

The Mesa Community College program to assess student learning has helped to answer the question, "Are students learning as a result of their experience at the college?" Evidence of student learning is clear in both the general education and the career and technical assessments; patterns of evidence across measures and over time reinforce the viability of the results.

The program has engaged faculty, students, and administrators in discussions about the desired outcomes from a general education program of study and from participation in a variety of career and technical programs of study. MCC faculty recognize assessment as one important tool to document the successes of college programs in terms of student learning and also to improve student learning. Through the efforts of the student outcomes committee as well as individual departments across the college, strategies for using assessment results are being formally proposed. These include faculty development, faculty collaboration across disciplines, and involving new and adjunct faculty members through a variety of means. Student assessment and its results strongly reinforce the college's commitment to its primary strategic direction—a focus on learning.

Ten Characteristics of Effective Assessment Programs

There is no standard model for developing a good assessment program. Just as each college and university lays claim to its own uniqueness, so will each develop its own unique assessment program. But there are organizational characteristics that can make the success of these programs more likely. These conditions form the foundation for effective assessment programs, and they apply to colleges and universities large and small, urban and rural, public and private. The characteristics were developed as a result of what has been learned over almost a decade of assessment practice at Mesa Community College, and the efficacy of the characteristics has been reinforced through recent empirical research, especially that of Peterson et al. (2002) and others.

1. **Assessment is driven by college values.** Assessment of student learning begins with the stated mission and values of the institution. At MCC, for example, the mission addresses transfer education, career preparation, continuous learning, developmental education, and economic development. Learning is one of the four core college values. These elements, then, form the foundation for and drive the college's approach to student outcomes assessment.

2. **The college makes a long-term commitment to assessment.** Good student outcomes assessment is a process, not an event. It is ongoing, not episodic. In successful assessment programs student learning is measured over time, and the language and practice of assessment become part of the college culture. Assessment requires a long-term commitment from the entire college community, from the president through the administration, the faculty, and the staff.

3. **The administration understands assessment and believes in its value.** Superficial administrative support for assessment is not sufficient for sustaining a successful assessment agenda. If college leaders simply pay lip service to student outcomes assessment in order to satisfy accreditation organizations, the assessment program will not be viewed by others as vital and important. Administrators must themselves be fluent in assessment practice and able to articulate its worth and demonstrate that they believe in its value.

4. **Faculty lead the program and own the results.** Just as college programs and curricula are clearly the purview of the faculty, so too is student outcomes assessment. An assessment program that is developed by the administration, staff, or any entity other than the faculty will fail. Faculty members need to be responsible for defining learning outcomes, determining the best methods for assessing those outcomes, providing input into data collection efforts, and using the assessment results to improve teaching and learning.

5. **Technical expertise and support are provided.** The technical aspects of student outcomes assessment can be daunting. While faculty members are experts in their subject matter, most are not experts in educational research methods and practices. In addition, expecting faculty to be responsible for the management and coordination of the people, tasks, and materials required to sustain an assessment program is unrealistic. With the technical support of an institutional research office, faculty members can focus on assessment by contributing their expertise with teaching, curriculum, and student learning.

6. **Learning outcomes are defined programmatically.** Educators are good at assessing learning outcomes at the classroom and course levels, but often are not familiar with the concept of defining and assessing student learning outcomes at the program level. A "program" implies any structured educational activity with specific goals and outcomes. A program might represent a course of study, for example, a general education program. It might be defined as a degree, for example, a bachelor of arts degree. Sometimes, programs are synonymous with departments, as in the case of most nursing programs. Once a program

is defined, specific learning outcomes expected to result from completion of the entire program can be defined by the faculty members who are collectively responsible for it.

7. **Measurement tools align with learning outcomes.** Assessment measures should align directly with the learning outcomes defined by the faculty. Sometimes, externally developed assessment tools can be identified that are well aligned with the outcomes. Often, however, faculty will not be satisfied with published assessment tools and prefer to develop their own. In this case, it is important to systematically pilot test the faculty-developed measures, conduct data analyses to determine the validity and reliability of the measures, and make appropriate revisions based on the analyses.

8. **A viable research design and sound research methodology are used.** When launching a student assessment initiative, it may be tempting to start assessing everything and everyone in the college. This approach will yield a large amount of data, but will tell little about what students are learning as a result of a defined program of study. By selecting a research design that is appropriate for the particular context of the college or university, the program will be much more likely to result in assessment data that are both valuable and credible. Exactly what will be assessed? Who will be assessed and when? How will the measures be administered? The use of commonly accepted research methods will provide the college community with assessment data that are valuable for making judgments about whether students are attaining the learning outcomes valued and defined by the faculty.

9. **Results are used by faculty to improve learning.** A good research design and data collection plan will provide good data for analysis. Once analyzed, results should be disseminated at levels appropriate to the various constituents of the college community. Faculty members, both individually and within their departments, should have ample opportunities to examine the assessment results and engage in meaningful discussions about them. They should be encouraged to make recommendations for changes in the curriculum or in teaching approaches that might improve student learning. Students and community members are also very interested in assessment results because they provide evidence about the effectiveness of an institution's programs of study.

10. **Assessment is linked to college planning.** Departmental and college-wide planning processes should be in place to accommodate the use of results from student assessment programs. At MCC, for example, departments review assessment results each fall when preparing their departmental initiatives for the following academic year. They propose departmental initiatives that address areas for improvement in student learning outcomes, and identify the resources needed to accomplish those initiatives. In addition, a cross-disciplinary "results outreach committee" has been formed to make recommendations for college-wide initiatives, such as faculty development, based upon assessment results.

The Assessment Investment

Developing, implementing, and sustaining a credible student outcomes assessment program requires a considerable investment by the faculty, staff, and administration of the college or university. If the program is successful, that investment of human and financial resources will be viewed as well spent. At Mesa Community College, by applying the characteristics outlined in this paper, the assessment investment has paid off. Assessment has become regular part of the way the college does business and is one of the cornerstones of the academic program. The characteristics provide a foundation upon which other colleges and universities can build successful assessment programs.

References

Marchese, T. 2000. Presentation at the 105th Annual Meeting of the North Central Association of Colleges and Schools. Chicago, IL.

Peterson, M. W., M. D. Einarson, A. G. Trice, A. R. Nichols, T. E. Perorazio, and L. A. Hendricks. 2002. *Improving organizational and administrative support for student assessment: A review of the research literature*, 2d ed. Palo Alto, CA: Stanford University, National Center for Postsecondary Improvement.

Schneider, C. G. 2002. Can value added assessment raise the level of student accomplishment? *Peer Review* 4:2/3, 4–6.

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Evaluating Assessment: Turbulent Flight in the Life of an Assessment Evaluation Pilot Process

Janice Collins and Josh Bullock

Introduction

Moraine Park Technical College in Fond du Lac, Wisconsin, offers a variety of certificates, associate degrees, and technical diplomas in occupational and vocational areas. As a learning college we redefined curricula and implemented an assessment portfolio process to meet the needs of employers and to monitor and improve student learning. This paper will take you through the turbulent flight of a pilot evaluation process of the assessment plan at Moraine Park.

Pre-flight Planning

In 1999, Moraine Park Technical College began pre-flight planning for assessment of student learning. Moraine Park Technical College's traditional use of a performance-based curriculum directed the selection of learning portfolios as the method of assessing student learning. The challenge with any assessment process is to quickly and efficiently integrate this transition into the college's operations and core culture. Initially, the Higher Learning Commission's "Levels of Implementations—Patterns of Characteristics" was used as the guide for integrating assessment throughout the college. As a pilot is required to file and follow a flight plan for reaching the final destination, students are similarly required to plan the collection of artifacts to be used as evidence of learning in compiling an assessment portfolio. This flight plan is a requirement for all students' final destination—graduation.

The Turbulent Takeoff

In August 2000 Moraine Park Technical College's assessment plan took flight after several years in development. Students who started coursework toward a technical diploma or an associate degree at that time were required to collect artifacts to include in their portfolios. In June 2001 the first portfolio evaluations were conducted on the first group of graduates. In the review of these first submitted portfolios, it became evident that many students' flights experienced extreme turbulence in the form of miscommunication, misunderstanding, and lack of direction from faculty and staff. This meant that many students were off course in reaching their final destinations, and it left faculty confused and frustrated.

Also, in June 2001 a full-time outcomes assessment associate was hired to captain the process and seek improvements. Over the course of the next year measures were taken to increase communication and clarify the process for faculty and students, including providing students with portfolio checklists for compiling artifacts and guidelines to assist them in organizing their portfolios. In addition, an effort was undertaken to create college-wide awareness of assessment through faculty forums, assessment newsletters, and "Sparkles" recognition awards to anyone in the College community for outstanding contributions to the assessment process.

In June 2002, the second group of student portfolios was reviewed. These portfolios were noticeably improved from the 2001 portfolios, in that students were able to link reflections on learning to artifacts as evidence of learning. Awareness of assessment throughout the college also appeared to have increased. Much of the information gathered was anecdotal with qualitative value. Quantitative data to measure effectiveness of the assessment process were necessary to validate that the assessment plan was on course.

By 2002, two years into flight, the assessment plan directed that it was time to officially gather quantitative data to track course and direction of assessment within the college and to gather baseline data to measure "where we stand today." A pilot evaluation survey was launched to follow the assessment process. Much like a hot air balloon following the air streams, we were frequently blown off course and often accused of being full of hot air, but we needed proof to ensure that we were still on course. With the "Assessment Matrix—Patterns of Characteristics" (The Higher Learning Commission, March 2002) as the map, our direction and goal were clear.

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The goal was to determine which level of implementation Moraine Park's assessment plan was at in fall 2002: Level One, Beginning Implementation of Assessment Programs; Level Two, Making Progress Implementing Assessment Programs; or Level Three, Maturing Stages of Continuous Improvement. Using the size of the institution and the scope of the research as our anemometer, we realized that a written survey instrument would be the most manageable way to conduct the research.

Reaching Cruising Altitude

Once take-off was complete and cruising altitude was reached, seatbelts were unclasped, and the team began to design the survey instrument. Questions were developed using the characteristics and descriptors provided in the "Assessment of Student Achievement: Levels of Implementation" published by The Higher Learning Commission (March 2002). The pilot, Janice Collins, and the navigator, Josh Bullock, solicited feedback from many ground and flight crews (faculty and staff) throughout the process to ensure that the metrics addressed Moraine Park's learning college principles. Questions were framed to allow respondents to state their levels of agreement with each assessment related statement. A four-point Likert scale was used, with choices of strongly agree, agree, disagree, and strongly disagree. In addition, a response of "not sure" was included to prevent forcing respondents from stating agreement with unfamiliar statements. Because items were included from each of the four sections of "Patterns of Characteristics," the final product was a five-page, scanner-based survey instrument consisting of seventy-eight items.

Faculty who act as assessment advisers recommended surveying all groups affected by assessment in the college. Thus, a sample of 545 people was drawn, consisting of 181 support staff, 79 managers/confidential employees, 145 faculty members, and 140 call staff (adjuncts).

The survey was distributed via intercollege mail in early December 2002. A modest (edible) incentive was used to encourage respondents to complete and return the survey to their respective campus libraries within a two-week window. Due to the short time frame for fielding the survey, reminder letters were not sent out.

Cleared for Landing

As our journey neared the end of its first leg, we radioed the control tower and prepared for landing. Was our connecting flight on schedule, or would we meet with unexpected delays? A total of 210 responses were returned by the survey close date, for a respectable response rate of nearly 39 percent. The baggage carts quickly arrived and whisked the surveys off to the College Research Services office for scanning into Teleform and data analysis using SPSS. The landing had been smooth; it was time to deplane and debrief.

Post-flight Debriefing

Given the turbulent takeoff and lengthy flight, the pilots were anxious for a debriefing. Is the college assessment plan still on course? Or have the prevailing winds pushed us farther from our destination? Data were analyzed in aggregate as well as being broken out by employee groups, campus location, length of employment at the college, and whether respondents had participated in a professional development session on Moraine Park's assessment plan. Some critical debriefing points are presented in the tables below. Note that the debriefing points address only the perceptions of the faculty group and do not include the perceptions of the staff, managers/confidential employees, and call staff (adjuncts). It should also be pointed out that in many instances the faculty's level of agreement with the assessment statements was lower than expected, not as a direct result of high levels of disagreement but because many respondents simply stated that they were "not sure."

In Table 1 it can be seen that nearly two-thirds of faculty view assessment as part of the college's culture and valued across the institution, but they do not recognize assessment as a resource to improve teaching and learning, and believe that students view assessment in the same way. Ironically, faculty members believe that managers view assessment findings as a source of improving teaching and learning.

Table 1: Faculty Perception of Institutional Culture

INSTITUTIONAL CULTURE Faculty perceptions only*	Agree Strongly Agree	Disagree Strongly Disagree
Collective Shared Values		
Faculty view assessment activities as a part of MPTC's culture or "way of doing business."	59.4%	29.7%
Faculty view assessment activities as a resource and tool to be used in improving student learning in all programs.	29.2%	55.4%
Students view assessment activities as a resource and tool to be used in improving student learning in all programs.	16.9%	64.6%
Assessment of student learning is valued across the institution and the programs it offers.	49.2%	41.5%
Assessment of student learning is an integral component of occupational programs.	71.9%	14.1%
Managers regard assessment findings as a source of knowledge essential for continuous improvement in instruction and program offerings.	50.8%	20.0%
Faculty regard assessment findings as a source of knowledge essential for continuous improvement in instruction and program offerings.	40.0%	49.3%
Mission		
Assessment materials, documents, and reports reflect the use of assessment results to improve student learning.	38.5%	40.0%

* Totals do not add up to 100% because they do not include the "not sure" response.

Faculty members perceive that a vast majority of their peers engage in assessment practices that provide evidence of student learning, yet do not speak publicly in support of assessment (Table 2). They believe that quantitative and qualitative assessment measures are aligned with course and program outcomes and are taking responsibility for ensuring that direct and indirect measures of learning are aligned with these outcomes.

Faculty members perceives that the assessment process receives outward support by top management. In addition, they believe that students are becoming more knowledgeable about assessment and are provided formal occasions to reflect upon their academic work and their thoughts about their achievement of learning outcomes. Although student knowledge is increasing, more than 50 percent of faculty surveyed believe that students still know little or nothing about how the assessment process will be carried out, their role in its success, or how it could be useful to them.

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Table 2: Faculty Perceptions of Shared Responsibility

SHARED RESPONSIBILITY Faculty perceptions only*	Agree Strongly Agree	Disagree Strongly Disagree
Faculty:		
A majority of instructors engage in assessment practices that provide evidence of student learning.	70.4%	9.4%
A majority of instructors speak publicly in support of assessment.	12.7%	57.1%
Faculty members are taking responsibility for ensuring that direct and indirect measures of student learning are aligned with the learner outcomes.	65.7%	10.9%
Quantitative assessment measures are aligned with course and program outcomes.	67.2%	12.5%
Qualitative assessment measures are aligned with course and program outcomes.	70.3%	9.4%
Administration and Board:		
The Vice-President of Teaching and Learning, Deans, Partners, and other administrators demonstrate their commitment to assessment through outward support of assessment personnel and activities.	76.1%	6.4%
Students:		
Students are becoming knowledgeable about MPTC's assessment processes.	71.9%	21.9%
Student leaders educate their peers about the assessment process through conversations, public presentations, and written communications.	21.9%	21.9%
Students know little or nothing about the assessment process: they do not understand how it will be carried out, their role in its success, or how it could be useful to them.	51.6%	39.1%
Throughout their academic programs, students are provided formal occasions to reflect upon their academic work and express their thoughts about their achievement of learning outcomes.	57.1%	12.7%
Students are regularly required to present explanations of how work assignments demonstrate attainment of course and program outcomes.	40.7%	23.3%

* Totals do not add up to 100% because they do not include the "not sure" response.

It is evidenced in Table 3 that faculty members are aware of the formal assessment processes and documentation in addition to perceptions of assessment's integration into the curriculum. Also, faculty members agree that there is a good level of communication about assessment to the campus community and a belief in the commitment of the major process team to improvement. Just over one-third of faculty respondents think that sufficient resources are budgeted to operate and sustain the comprehensive assessment process. About the same number of faculty respondents believe that the institution regularly collects data and evaluates the assessment process.

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Table 3: Faculty Perceptions of Institutional Support

INSTITUTIONAL SUPPORT Faculty perceptions only*	Agree Strongly Agree	Disagree Strongly Disagree
Resources:		
Sufficient resources are allocated in the budget to operate and sustain the comprehensive assessment processes.	42.2%	18.7%
Structures:		
There is written documentation of the implementation of the assessment plan.	77.7%	3.2%
Syllabi for courses and programs state measurable objectives for student learning and provide for the assessment of students' academic achievement.	76.6%	7.9%
The institution maintains a system of data collection that helps sustain an effective assessment process.	37.5%	20.3%
The comprehensive assessment process is evaluated regularly.	37.5%	14.1%
Members of the Outcome Assessment Major Process Team serve as advisers to individuals and teams working to develop or improve their assessment process and activities.	68.2%	14.3%
Information about assessment activities and their results is communicated regularly to the campus community.	54.7%	29.7%

* Totals do not add up to 100% because they do not include the "not sure" response.

Faculty respondents overwhelmingly agree that student learning is central to the culture of the institution and that finding ways to improve it is ongoing (Table 4). But, faculty respondents do not believe that assessment results are currently being used for this purpose. This belief may be exacerbated by the fact that nearly 83 percent of faculty respondents agree that confusion exists regarding the different purposes and relationships among: faculty evaluation, assessment of student learning, program review, and institutional effectiveness. Only 39 percent of faculty perceive the college to be publicly celebrating demonstrated student learning, performance, and achievement.

Table 4: Faculty Perceptions of Efficacy of Assessment

EFFICACY OF ASSIGNMENT Faculty perceptions only*	Agree Strongly Agree	Disagree Strongly Disagree
Implementation of the assessment process is progressing at an expected rate.	42.2%	14.1%
Academic programs are using assessment results.	42.9%	14.3%
Confusion exists regarding the different purposes and relationships among: faculty evaluation, assessment of student learning, program review, and institutional effectiveness.	82.8%	4.7%
Academic programs are collecting, interpreting, and using the results obtained from assessing student learning.	35.9%	21.9%
Student learning is central to the culture of the institution.	75.8%	17.8%
Finding ways to improve student learning is ongoing.	74.6%	12.7%
Programmatic benchmarks are established against which students' learning outcomes are assessed.	42.9%	9.5%
The institution publicly celebrates demonstrated student learning, performance, and achievement.	38.7%	20.9%

* Totals do not add up to 100% because they do not include the "not sure" response.

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Preparing to Meet Our Connecting Flight

Debriefing notes in hand, the pilots begin to make minor adjustments to flight plans in anticipation of the second leg of the journey, relieved that they are still on course and on schedule. Until the data are further analyzed, no major changes in the assessment plan will take place, only immediate tweaks to react to the changing atmospheric conditions. Several short-term actions have been identified, including the following.

- Devise action plans to increase faculty's use of assessment as a tool for improving student learning in all programs.
- Encourage faculty to publicly speak out in support of assessment by sharing their successful assessment practices with the learning community.
- Increase efforts to educate students on the purpose and value of assessment in improving their own learning experience.
- Utilize educational tools to eliminate faculty's confusion among faculty evaluations, assessment of student learning, program review, and institutional effectiveness.
- Maintain efforts to incorporate the assessment process into the college's "way of doing business."
- Continue faculty involvement as members of the Outcome Assessment Major Process Team for decision-making processes and communicating assessment principals throughout the college community.
- Maintain management's outward support of assessment processes.
- Continue our practices that align quantitative and qualitative assessment measures with course and program outcomes.

This document provides an overview of our flight plan. There is still much analysis to present in regards to management/confidential employee, staff, and call staff perceptions concerning assessment. In addition, the effects of assessment training, campus location, and length of service with the college will be addressed in the presentation session and subsequent roundtable discussion.

Bibliography

The Higher Learning Commission (HLC). 2002. Assessment of student academic achievement: Levels of implementation. In *Addendum to the handbook of accreditation*, 2d ed. Chicago: HLC. Available from <http://www.ncahigherlearningcommission.org/resources/assessment/Lopez_Levels_2000.pdf>.

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Gauging the Level of Faculty Participation in Student Academic Assessment

Steve Boettcher, Bryan Tippett, and Clay Goodman

Introduction

The levels of implementation model has been used by many institutions of higher education to self-assess the progress of their student academic assessment programs (López, 1999). The pattern of characteristics provided for each level of implementation helps determine whether the assessment process shows beginning implementation (Level One), some implementation (Level Two), or ongoing implementation (Level Three). The language of assessment requires a common point of reference, and consultant-evaluators may use an institution's levels of implementation analysis to facilitate discussion about the assessment program.

During a recent accreditation team visit, Estrella Mountain Community College found that neglecting to gauge the level of faculty participation may undermine an otherwise successful assessment program. The question "What percent of the faculty have bought into assessment at your college?" may appear to be fundamental, but the levels of implementation matrix does not provide a clear answer. Although Estrella Mountain Community College conducted levels of implementation analysis, no college information or evidence provided appropriate documentation for the level of faculty participation in assessment. This paper discusses the problems that result when faculty buy-in is not gauged, and presents ideas for achieving the highest level of assessment program implementation.

Background

Estrella Mountain Community College is the newest of the ten Maricopa Community Colleges located in metropolitan Phoenix, Arizona. The college enrolled 7,300 students last year and expects a 10 percent increase this year. At present, there are fifty-one full-time faculty members.

In 1996 Estrella Mountain applied for initial accreditation with the Higher Learning Commission. As a result of the initial evaluation team visit, the college was required to submit a progress report on student academic assessment. The Higher Learning Commission approved the 1998 progress report, which updated the college's plan for student academic assessment.

The student academic assessment plan was updated again in 2001 as part of Estrella Mountain's preparation for its first ten-year accreditation team visit in February 2002. In addition, the college used the levels of implementation matrix (López, 2000) to conduct a self-assessment of the student academic achievement process. Compared to the patterns of characteristics provided for each level, the self-assessment indicated that the assessment program at Estrella Mountain was at Level Two, with some characteristics at Level Three.

In February 2002 the visiting team recommended continued accreditation with the next comprehensive evaluation in ten years and no interim monitoring. However, the visitation team pointed to the lack of full faculty participation in student academic assessment as an issue of concern. The visitation team report commented that "approximately one-half of faculty who teach general and/or transfer-education courses have not truly 'bought in' to the process [of student academic assessment]." The college understands that the remark was made by a faculty member of the Student Academic Assessment Committee either as a casual conversation with a visiting team member or during one of the visiting team meetings with college faculty. Regardless, no college information or evidence existed to either substantiate or refute this claim.

The claim about the level of faculty support had an unfortunate result. It allowed the readers' panel to disagree with the findings of the visitation team and recommend a focus visit on assessment. Confusion was warranted because the college did not gauge the level of faculty participation with appropriate documentation. When Estrella Mountain appealed, the review committee upheld the visiting team's recommendation based on additional information not available to the readers. While the appeal was successful, the college found that neglecting to gauge the level of faculty participation could have undermined an otherwise successful assessment program.

If an institution is at Level Two with some characteristics at Level Three, do you know what percent of the faculty have bought into assessment? The term *faculty buy-in* appears in the 2002 levels of implementation matrix (López, 2002), and faculty involvement is an essential component of any assessment process. However, if full faculty participation in the assessment process may be an area of concern, then Estrella Mountain's self-study experience suggests that an appropriate means of documenting the level of faculty participation in student academic assessment is needed.

Problems with Documenting Faculty Support for Assessment

An approach that gauges individual faculty members' support for the student academic assessment process faces major hurdles. Faculty resistance to an employee evaluation that includes the assessment process is strong. At Estrella Mountain, the assessment effort has deliberately been kept separate from the employee evaluation process. The residential faculty policies do not require participation in the assessment program, and an attempt by the college to create this requirement would be perceived as a violation of current policy.

When preparing documentation for the appeal, there was hope that a questionnaire that gauged faculty support for student academic assessment might provide useful information. An anonymous survey was administered by the faculty senate with a 90 percent response rate (forty-six out of fifty-one). The first question was

> *Classroom level assessment* involves measuring what students learn and using the results to improve the instruction in your particular class. How do you respond to the following statement? "My activities support classroom level assessment at Estrella Mountain."

One hundred percent of the faculty responded that they "strongly agree" or "somewhat agree" that their activities support classroom level assessment. The second question was

> *Institutional level assessment* involves measuring what students learn and using the results to improve the instruction college-wide. Two student abilities that Estrella Mountain assesses at the institutional level are *critical thinking* and *communication*. How do you respond to the following statement? "My activities support institutional level assessment at Estrella Mountain."

Ninety-six percent of the faculty responded that they "strongly agree" or "somewhat agree" that their activities support institutional level assessment, and 4 percent reported that it was "not applicable." The high percentages that indicated support for the assessment process as well as the self-reporting aspect of the survey made the results appear to be biased and/or false. It was concluded that the questionnaire was not an appropriate means of documentation, and the survey results were not included in the appeal to the review committee.

Ideas for Gauging Faculty Support for Assessment

After discussions with the faculty and the Student Academic Assessment Committee, Estrella Mountain has opted to pursue an approach that has received the unanimous support of the division chairs; namely, assessment will be incorporated in each division strategic plan. The plans will provide a description of each assessment activity supported by the division faculty, a rationale for the level of implementation that each activity supports, a description of how the results will be measured, and a summary of the outcomes produced (if available). Results showing the percent of faculty involved with activities that support Level One, Level Two, and Level Three as per the division strategic plans would be included. In addition, individual faculty members will be encouraged to develop an assessment portfolio that documents support for assessment. These portfolios will be reviewed by the coordinator of student academic assessment and by two peers chosen by the faculty member. The purpose of peer review is to provide feedback and to improve the level of assessment program implementation by deepening the culture of collaboration.

Conclusion

By neglecting to gauge the level of faculty participation in student academic assessment, Estrella Mountain found that the levels of implementation analysis did not provide a satisfactory answer to the question "What percent of the faculty have bought into assessment at your college?" An appropriate means of documenting the level of faculty participation in the assessment process is needed. One approach may be the use of division strategic plans to document assessment activities, augmented by individual faculty assessment portfolios that support these activities. The percent of faculty involved with activities that support Level One, Level Two, and Level Three as per the division strategic plans would be documented. Best practices for gauging the level of faculty participation in assessment have yet to be determined.

References

Estrella Mountain Community College. 2002. Institutional self-study report. Avondale, AZ: Estrella Mountain Community College.

The Higher Learning Commission (HLC). 2002. Assessment of student academic achievement: Levels of implementation. In *Addendum to the handbook of accreditation*, 2d ed. Chicago: HLC. Available from ‹http://www.ncahigherlearningcommission.org/resources/assessment/02-Adndm-Levels.pdf›.

López, C. L. 1999. A decade of assessing student learning: What we have learned; What's next? Available from ‹http://www.ncahigherlearningcommission.org/AnnualMeeting/archive/ASSESS10.PDF›. (Retrieved October 10, 2002.)

López, C. L. 2000. Assessing student learning: Using the Commission's levels of implementation. Paper presented at the 105th Annual Meeting of the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. Chicago, IL. Available at ‹http://www.ncahigherlearningcommission.org/resources/assessment/Lopez_Levels_2000.pdf›.

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Are We There Yet? One Institution's Assessment Adventure

Anneliese Homan and Beverly Wilkerson

Introduction

State Fair Community College (SFCC) offers associate of arts and associate of applied science transfer degrees as well as career and technical certificates to approximately 3,500 students in a fourteen-county service area in rural Missouri between Kansas City and St. Louis. When the institution first received NCA accreditation in 1974, it was struggling to distance itself from the nickname "Plywood U," which came from the cheaply constructed buildings housing its first classrooms and administrative offices. These buildings no longer exist. In fact, in only a decade the campus has gained four new multi-million dollar facilities funded by community donors' support, earned by faculty and staff who have established a reputation for academic integrity and quality service.

Prior to NCA's visit in 1999, most faculty agreed that assessment of student performance occurred each semester. If enough students failed to master an objective, more than likely something was wrong with the teaching method. Hence, the old one was altered or a new one was found. Many argued that good instructors conducted this process intuitively. For that reason, the suggestion that a formal plan should be created to document this process was met with polite disapproval from some and thunderous resistance by others. The reviewing team recommended that SFCC receive continued accreditation in 1999, but because most of the institution's programs lacked plans to assess learning or produce essential data for making decisions, NCA requested a progress report in 2002. By the time the requested report was prepared last spring, however, all programs had developed plans and had completed or were in their first round of collecting data. Although the SFCC assessment committee still has some issues to address, it has made significant progress in steering its faculty onto the chosen thoroughfare and in the same direction, despite some mid-route detours and bouts of road rage.

This paper chronicles the adventure. The session presenters, both student outcomes assessment committee members and department chairs, discuss the specific challenges the college has faced in its effort to emphasize the need for documenting assessment, not only as the practice has been traditionally conducted, but through the development of formal plans that communicate expected outcomes and identify a means for acquiring data to measure these outcomes. In turn, the presenters highlight the specific strategies used to help faculty members feel less like unwilling passengers and more like drivers with a clear sense of direction.

How We Got Lost

Perhaps there would have been less resistance toward the issue of formal assessment if a simple and precise plan for coordinating and implementing the assessment process had been presented to the faculty in the beginning. Prior to the site visit, only a few programs had addressed the issue of assessing student outcomes for program improvement. Of the twenty-seven programs, only the nursing, medical office assisting, custom applicator, and automotive and industrial maintenance programs had documented measurable competencies, albeit at various stages of specificity. By 1996, the general education program had established five goals that were being assessed throughout the curriculum; however, many faculty members had difficulty with this process. They couldn't make the connection between the general education goals, program goals, and using the data to improve student learning. Faculty were also skeptical that their efforts to produce data would be meaningful or contribute to and enhance student learning, and program coordinators felt that assessment was an additional responsibility not included in their job description.

In the meantime, members of the assessment committee themselves had no clear sense of the direction the institution's assessment process should take. When the self-study committee for assessment co-chairs looked to the administration for guidance, they were simply told to "study the process." Because no one clearly understood the process, the institution was not able to clearly articulate a plan. Consequently, as the NCA review team noted in the 1999 report, assessment efforts were "unfocused." In its comments, the team reported that assessment work was limited to the course rather than program level and appeared to be "a highly individualized activity rather than a group process to improve the institution" (Griego, et al., 1999, p. 17). The existing data often could not be tracked, or they were inappropriate. For instance, the art department relied on an outside juror to evaluate student work and provide feedback, but no established competencies or criteria upon which to conduct the evaluation existed. The education program had designed a

survey that measured the quality of its program, but opinion rather than student learning was the focal point of the assessment. Although the institution required students to take the Academic Profile or the CAAP tests as exit exams, the findings weren't shared with faculty members in a way that allowed them to make curriculum changes. More significantly, the team concluded, most of the current assessment plans did not provide an effective means of generating the data needed for sound decision making, including budgeting and planning.

Finding Our Way

After the NCA team's visit, assessment committee members were determined on resolution of the assessment issue by the time the requested progress report was submitted in 2002. The group reorganized as the student outcomes assessment committee (SOAC) and expanded its membership to include individuals who had responsibility for the various components of the assessment process. NCA team members had noted in their report that administrative roles needed to be created to ensure consistent practice and monitoring. The new committee was composed of the vice president of educational services, the director of institutional planning and effectiveness, two assessment counselors, an institutional research statistician, and five faculty members from the AAS and AA transfer programs, respectively, who would serve three-year terms.

In fall 1999 the committee established new goals, including

- Determining what was currently done to assess student learning and development
- Establishing and refining an approach to student outcome assessment
- Guiding development of program assessment plans
- Reviewing assessment processes on a regular basis
- Providing appropriate training and educational opportunities for faculty and staff to facilitate the necessary awareness and understanding of key assessment issues and practices
- Distributing assessment information to faculty, staff, administration, and community
- Formalizing assessment programs to curricular budget and planning processes
- Marketing the college, divisions, and faculty's assessment process
- And, generating an awareness of the goals and student assessment throughout the college that extended beyond campus boundaries (State Fair Community College, 2002, p. 2)

Before this, the faculty had significant administrative support for assessment initiatives. Money was approved for travel to various assessment conferences at which faculty networked with faculty from other institutions, many of whom were equally clueless about the direction an institutional plan should take. A mini-grant program drawing from Funding for Results money was established to encourage innovative projects for assessing student learning, but the projects related more to course-level than program-level assessment. It was the NCA meeting in Chicago in 2000, however, that introduced committee members to the document that provided the road map: Cecilia López's "Levels of Assessment." The SFCC director of institutional effectiveness adapted López's levels into a notebook format, complete with a series of questionnaires intended to help program coordinators determine the focus for their plans and the most efficient way to conduct them. The notebook would also become the means for documenting data and the resulting changes. SOAC members were first oriented to the format, and they in turn served as mentors for program coordinators. As programs began to move through the various phases of assessment, coordinators identified missing links in the process. Some learned of better testing methods, for instance, but lacked the funds to implement these methods. To provide the necessary financial assistance during this period, the mini-grant program was refocused to limit funding to projects that directly related to program assessment rather than individual classroom projects. This included support for the LS 2000 software system that has been implemented in the nursing program to provide integrated tests at the end of each content area.

Although some AAS faculty are making more progress than others, all are following the same rules of the road. The structured levels of López's plan not only helped unify the faculty's understanding of the process, but also simplified the institution's task of documenting it. To keep the programs on task, SOAC designed a three-tiered rubric to serve as an evaluation tool for the various program plans. The rubric was introduced to the program coordinators in fall 2001. During the following year, all program coordinators were asked to submit their notebooks to a team of SOAC committee members who determined which assessment level the plan had achieved. These teams, in turn, presented their conclusions to the SOAC committee along with recommendations for improvement. In addition, the administration revised the program coordinator job descriptions as well as faculty evaluations to include student assessment.

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In the meantime, the faculty responsible for general education program assessment were sitting in an intersection arguing about which direction to take. In fall 1999 a student outcomes assessment subcommittee revised the original general education assessment plan to include three studies: the Academic Profile entrance and exit exams, transfer data from Central Missouri State University and the University of Missouri in Columbia, and an internal study conducted by general education faculty. This subcommittee also recommended the development of a general education assessment committee with ten faculty members and one ex-officio member who would analyze the evidence collected to assess the program's five goals, which had been defined three years earlier. Several members of this committee, however, openly opposed suggestions for collecting data—either because they didn't believe the method could be efficiently implemented in their discipline or they believed nothing would be done with the data. In addition, members were concerned that the plan would be impossible to implement at all of the off-campus sites where general education courses were taught. Another factor that complicated the issue was the Missouri Coordinating Board for Higher Education's (MCBHE) directive for all general education core courses. It had recommended that all state institutions implement an assessment component because of the growing number of articulation disputes between community colleges and transfer institutions. The MCBHE's suggested goals and competencies were still in the drafting stage when the SFCC general education assessment committee began meeting to fine-tune its plan, and the group questioned the rationale of involving the faculty in an internal course assessment of the original goals when the institution must soon comply with the new state goals.

Because little data had been collected to assess SFCC's general education program, committee members agreed, some grudgingly, that two courses for each of the five goals would be assessed each semester until the state goals were in place. The process would involve two members of the general education assessment committee and the course's lead instructor who would together examine evidence of student performance from each class. This sampling of evidence would consist of work from ten or more students and might include final exams, portfolios, essays or responses to essay questions, videotaped presentations, or lab worksheets. Consistent with the Academic Profile's means of reporting results, this evidence would be evaluated according to a three-tiered scale: The first tier suggests that students have no understanding of the goal's intended outcomes, the second that students have an acceptable understanding, and the third that they have an exceptional understanding.

The first round of data was collected in spring 2000, but the findings were reported for only three of the five goals. No evidence was collected for one goal because the faculty misunderstood the type of data needed. Although evidence was collected for a second goal, the results were never interpreted. Furthermore, as the group had predicted, the process of gathering data from off-campus sites was frustrating. Adjunct faculty taught most of the courses selected for assessment at these off-campus sites, and for reasons including poor communication, much of these data were never collected.

Fortunately, the general education program's external assessment methods appeared to be a more efficient means of generating evidence for analysis. The study of GPA and graduate rates of CMSU and UMC transfer students was a valued tool, although gaps existed in data collection and CMSU's reporting format differs from UMC's. The Academic Profile was more reliable. All students pursuing associate of arts degrees had been required to take the test as an exit exam since 1991. Because the Academic Profile measured the general education areas of math, writing, reading, natural and social sciences, and humanities, generating both nationally normed and total scores, the committee had concrete evidence for ten years of student performance. Furthermore, the test was designed in a framework that could be meaningfully interpreted by many faculty members. The Academic Profile identifies three levels or tiers of skill for each general education area it tests. In fact, the descriptions for these three skill areas directly correlate with the competency levels for each of the three courses in the program's math and writing sequence. The test also suggests that the mastery of key reading skills at tier levels I and II is directly related to the mastery of critical thinking skills. To provide more substantive data, all first-time degree-seeking students were asked to take the Academic Profile as an entrance exam as well in the fall 2000 semester. Although the institution's assessment counselors have struggled the first two years to convince enough students to comply for the study to be significant, it is hoped that this component will provide more information in the future regarding how much students learn in the general education area while they are enrolled at SFCC.

At a celebration of learning session in April 2001, the results of the Academic Profile were presented to the faculty as evidence that assessment is a valid exercise that reaps meaningful information. Interpretation of the data suggested that SFCC's students usually scored slightly above the national norms in all seven general education areas. Furthermore, when the fall 2000 entrance scores were compared with the long-range averages, the findings suggested that students made significant gains in all general education areas. However, an analysis of the performance level students actually reached at the point of graduation indicated room for improvement. While 37 to 51 percent achieve at the level II tier, only 10 to 14 percent of the graduates actually progress to level III. For this reason, faculty were encouraged to consider curriculum changes that might move more students into the level III skill area. In response, many accepted the Academic Profile as a credible tool for assessment, and some even agreed to consider curriculum changes to address the issue. Finally, after nearly five years of resentment and confusion, the process of assessing the institution's general education core courses seemed to be a valuable means of providing insight about what students were actually learning.

In fact, some faculty were now convinced that the Academic Profile was the only assessment tool necessary. But most members of the general education assessment committee agreed that because the test measures only skill levels and does not address the knowledge areas embraced by the general education core classes, other assessment methods must be in place. This continued to be a source

of contention for the committee. By fall 2001, the state general education goals had been approved. They consisted of four skill goals and four knowledge goals, and the committee members decided that the current plan for collecting data should be abandoned so that the group could focus on integrating the institution's goals with the state's. Although some members of the faculty resented the state's directive, in retrospect it was the road map the AA faculty needed. Today, the new plan is structured in a matrix format, listing goals and their competencies and the courses that address them, and the original plan's three-tiered evaluation method has been adapted. In January 2003 the general education assessment committee chair met with all full-time and adjunct general education faculty and asked that a unifying paragraph be included in all general education course syllabi. Faculty were also asked to include the specific goals and competencies that each course addresses in all fall 2003 syllabi, a task that will be supervised by department chairs. Most remarkably, the January 2003 meeting marked the first time the general education faculty has met without disagreement in four years.

Moving onto the Superhighway: An Institutional Culture of Assessment

Looking back, three factors have played an integral role in helping SFCC faculty recognize the value of formal assessment.

- **Communication.** Assessment workshops and roundtables are a part of each fall and spring all-faculty in-services. These activities have included a best practices fair in August 2001, at which faculty discussed classroom assessment techniques (CATs) and, in January 2002 an evaluation of the status of the institutional assessment culture. A quarterly assessment newsletter has also been created; articles highlight the efforts of faculty and administration and provide documentation of results. This newsletter is circulated at off-campus sites and in the community. And, since spring 2002, a colorful student flyer highlighting the purpose of course assessment is included in new student orientation packets.

- **Faculty ownership.** Although program coordinators and faculty are expected to work within the institution's assessment plan framework, they determine what evidence will be collected and the criteria for its evaluation. For instance, in the last two years, the English faculty has simplified the assessment of the English composition sequence significantly. Although the NCA team noted that the English faculty had established competencies, developed a rubric, and made textbook and other curriculum changes based on the data they had collected, the exercise was a tedious chore carried out each August that most of the English faculty dreaded. Now, the faculty collectively evaluates only a random sampling of source-based papers gathered from all fall and spring sections of English Composition I and II. All full-time and adjunct faculty from all campus sites meet to grade six students' work, their Composition I essay matched with the paper they completed in Composition II. In turn, each faculty member grades five additional sets of papers with a partner. Not only is the three-hour activity an effective means of gathering data, but it provides an opportunity for meaningful discussion about student performance and builds faculty unity in regard to grading standards. A Funding for Results mini-grant provides meals and a stipend for adjuncts. In August 2002, TECH-PREP provided stipends to include twelve area high schools in the process as well.

- **Documentation of the results.** Most importantly, a number of changes have been made as a direct result of assessment in the institution.

    - The results of and ASE end of the program test for the automotive technology program indicated that the area of electronics and transmissions needed to be strengthened, and the program coordinator constructed mock-ups and training aids to improve student performance. Data will be collected from future exit tests to determine whether that change has contributed to improvement.

    - As a result of data input from its advisory council, the industrial management program has replaced the requirement for microeconomics with an elective, and a new three-credit-hour quality management and control course has combined two previous courses that addressed the same objectives.

    - A one-credit-hour critical thinking component has been added to the two-hour developmental reading course to improve the critical thinking scores on the Academic Profile.

    - As a result of a fall 2000 pilot program for college algebra that indicated that students' performance improved with five hours of instructional contact per week, the course has been expanded from three to four credit hours as of fall 2003. Following in suit, and as a result of an evaluation of final exam scores, basic math and elementary algebra classes have been expanded to a five contact hour class as of fall 2002. Students pay for three credit hours but participate in five contact hours a week.

    - The business management program has integrated more technology into many of its required courses as a result of the evaluations students received during their business and industry internships.

    - Data collected from the NCLEX-RN pass rates in the nursing program supported implementing the LS 2000 software program to test student's knowledge at the conclusion of each content area. In addition, mentors were assigned to students with low scores in the integrated nursing course, which resulted in all students' successful completion of the course.

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So, are we there yet? Although many faculty members would agree that assessment is finally an accepted and respected component of State Fair Community College's institutional culture, this adventure will have many sequels. Changes in administration and state as well as federal requirements for reporting student outcomes will create frequent challenges. As the college continues to add programs, expand its Web and dual-enrollment offerings, and accommodate the constantly changing needs of the American workplace, the assessment process will more than likely change as well, serving an integral role in the guarantee of academic integrity, far into the next century.

References

Griego, J., K. Linduska, D., Malek, S., Robinson, and D. Crist. 1999. Report of a visit to State Fair Community College. Chicago, IL: The *Higher Learning Commission*.

State Fair Community College (SFCC). 2002. Assessment progress report: Prepared for the Higher Learning Commission. Sedalia, MO: SFCC.

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The Road Not Taken: An Assessment Program Where Everyone Wins

Karen Jones, Michael L. Banks, Jacqueline Gray

Introduction

"Two roads diverged...long I stood and looked down one as far as I could." Robert Frost's *The Road Not Taken* about choices and their consequences accurately describes the dilemma facing most schools as they try to figure out what must be done with assessment. Looking "as far as I could" often involves attending and sending people to the many assessment conferences that have sprung up over the past fifteen or twenty years. On most campuses, the impetus for looking down the road comes less from a sense of institutional need to know how students are doing than from a response to demands from state agencies and regional accreditation groups. In his keynote address at the 2002 AAHE Assessment Conference, Peter Ewell noted "the fact that it [assessment] almost always begins at the behest of somebody else creates a pervasive feeling on the part of faculty of being 'done to' rather than doing" (2002, p. 3). St. Charles Community College's (SCC) early attempts at assessment illustrate that reality quite clearly.

In the mid- to late 1980s, the college, led by administrators, created a committee that reviewed some standardized tests and plotted ways to get students to take them. The path to be taken seemed smooth, flat, and obvious. Choose the test, make taking it a graduation requirement, charge students a fee to cover the cost, and report to all interested parties that SCC students had above average scores. And so the assessment car, chauffeur-driven by the testing company, pulled out of the station carrying satisfied administrators along a smooth path.

In retrospect, the problems inherent in that original plan are glaringly obvious. Students were not charmed by the idea of using their time and money on another test they perceived as irrelevant. In addition to complaining, they completed tests in record time and escaped. The results reported by standardized testing companies still indicated above state and national average results. Academic administrators created charts and graphs. Faculty members ignored the entire thing; after all it was an administrative problem. And, for a time, the demands from outside constituencies were quelled. The road had bumps and potholes, but adequate padding kept administrators comfortably dozing in the back seat.

Of course, some things changed relatively quickly. Students were bribed, not charged, to actually show up and take testing "seriously." Testing supervisors distributed bookstore discounts, T-shirts, and food vouchers. But things rolled relatively smoothly until outside evaluators arrived for an accreditation review. Their evaluation of our assessment process and reports brought the assessment car to a halt so abrupt that the administrators in the car suffered whiplash.

Creating a New Assessment Plan

After the usual shock, puzzlement, and finger pointing, SCC administrators, a courageous lot, regrouped and rethought. The results of that decision to begin again created a process for assessment that engaged faculty and has already resulted in curricular changes and judgments about program content. Beginning in fall 1998, assessment was turned over to faculty. A faculty task force with members from all of the academic divisions of the college began by engaging the entire faculty in a dialogue. The campus curriculum committee had just reviewed the general education requirements for the AA transfer degree. As part of that review, they had developed a goal statement for general education and for each category of general education. During AY 1998–1999, faculty began reviewing and revising the general education assessment process using the general education philosophy and goals recommended by the curriculum committee in spring 1998.

The faculty assessment coordinator and division assessment leaders (all faculty members) worked with faculty in discipline areas to develop general education objectives for each of the six subcategories within the general education requirements. Faculty members reviewed the specific course objectives, and by the end of the academic year most had identified objectives congruent with general education goals. Faculty in each subcategory created instruments and processes to be used in 1999–2000 to measure student outcomes.

The General Education Assessment Plan

Because the faculty decided to base assessment on locally developed goals and objectives, each of the areas represented in general education created a locally developed assessment project with a goal of improving coherence in curricula and student learning. Assessment projects were developed in writing, speech, humanities, social science, mathematics, and computer literacy.

- **Writing assessment.** Since 1992, English faculty members have used a holistically scored entrance essay to place students in one of three beginning writing classes—two developmental and one college level. The process was expanded by requiring a department final exam of all enrolled in the developmental courses. Observations from that scoring process and a review of pass-fail rates led English faculty to revise placement criteria and curricula in both developmental writing classes. Those revisions improved the success rate of students in subsequent classes.

  Beginning in fall 1999, all English Composition II students write a required essay based on a packet of readings distributed one week prior to final exams. Students receive a grade from their instructor. A random sample of student writing is evaluated independently by the English department reading team, using an analytic rubric keyed to course objectives. Scores are reported by objective to all writing teachers, and strengths and weaknesses are discussed. Several units in composition were strengthened, and a more structured direction sheet was developed for use in student final exam preparation.

- **Oral communication.** Oral communication combines common final exam test items with a review of a random sample of taped speeches. The department routinely taped student speeches for students. Students were asked to study their own performances as recorded and provide self-assessments. As faculty members reviewed a broad sample of student tapes, they discovered both equipment and training needs within the department. Part-time faculty have become a part of the assessment process as information on student performance has begun to reshape curricular emphasis within the required class.

- **Math and science assessment.** On all final examinations, math and science faculty members use a set of common questions keyed to specific core objectives. Data are aggregated and reported to faculty. Recently, both departments have begun to correlate student scores with course grades. Math faculty members continue to struggle with problem selection for inclusion in final exams. Correlations between student scores on department-generated problems and student course grades show little relationship at present. The department is reviewing both core course objectives and testing methodology.Science faculty members developed a set of common questions that focused on student ability to apply scientific principles. After the first results were analyzed, it became clear that certain objectives were better measured in the lab portion of the course. When assessment began, all science courses met the general education science requirement. Based on the scores of students enrolled in science courses without labs, the department recommended that only courses with linked labs be included in general education.

- **Social science and humanities assessment.** These general education areas represented the greatest challenge, since both areas encompassed many disciplines. Both groups decided to begin collecting artifacts from students enrolled in courses meeting general education requirements and evaluate them based on rubrics developed by faculty in each area. In fall 2000, based on the results of the pilot project, faculty members adjusted the rubrics. They also agreed to ensure that at least one written assignment would be focused on general education objectives. Because the process provided only limited data, faculty members agreed to accumulate a minimum of four semesters of data prior to major curricular review.

- **Computer literacy.** Courses in computer science were required as a part of the general education core. Students were able to test out of this requirement by taking an examination to demonstrate their computer skills. The original assessment project developed for general education had no connection to that test-out exam. The difficulty in defining computer literacy and connecting that definition to the courses offered to meet the requirement resulted in two significant changes. Required computer courses were eliminated from the general education core. However, completion of specific courses continues to be a graduation requirement. In addition, computer science faculty have developed an entirely new test-out instrument and use it to assess the success of the course.

- **Career-technical program assessment.** Until 1999, career and technical program assessment was confined to licensure exams required by programs like nursing and to employment and satisfaction surveys. While those exams and surveys still provide information, other measurement processes have been added. General education for career-technical programs is often program-specific. In addition, faculty wanted to have a better idea of what specific skills students were acquiring and retaining.

  Their solution was to create a capstone course that would incorporate criterion-referenced standardized testing and portfolios to document student accomplishments. The majority of programs adopted a minimum of two elements from ACT-Work Keys as the general education component. This test allowed individual programs to focus on skills they believed most essential to their students and to establish targeted skill levels. Students worked individually with the capstone instructor to create

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portfolios and other materials appropriate to their program. Students have used those portfolios in job interviews to demonstrate their qualifications to prospective employers. Faculty have used one-on-one meeting times to assist students in their search for jobs after graduation.

Several programs have modified course requirements and created or deleted courses as a result of what has been learned from the capstone process. As general education requirements for career-technical programs undergo review, the standardized testing modules will provide information for any changes.

What We've Learned

It's possible to involve the majority of faculty in the assessment process. The faculty at SCC wanted nothing to do with assessment in 1999. If in 2003, someone suggested eliminating our assessment process, faculty would march on the president's office. They own it, they run it, and they have come to believe that the process of assessment improves their teaching and the education of their students.

It's impossible to have assessment without bloodshed—metaphorically, at least. On most campuses, the curriculum committee has the greatest potential to create campus-wide debate among faculty. At our campus, assessment "discussions" can be added. The contemplated shift in general education assessment to a capstone course had various groups insisting that "their" assessment projects be allowed to continue alongside the proposed capstone experience.

It's possible to create assessment projects that provide information about student performance relevant to the particular course structure of an individual college. Many colleges have done so and have shared information about those plans at assessment meeting across the country.

It's impossible to create a "one-size-fits-all" assessment plan that transfers to any college. Many elements in the SCC plan were inspired by projects reported by other colleges. But ultimately, as the process continued, our assessment responded to the demands of faculty for information immediately relevant to their students and their courses.

It's impossible to be "finished." Every question "answered" prompts another as yet "unanswered."

At SCC, assessment is messy, contentious, and faculty-driven. Administrators provide assistance and support. Students benefit. All of us now travel together on foot— the limousine sailed down the well-traveled road, and we took the other path.

References

Ewell, Peter. 2002. Perpetual movement: Assessment after twenty years. Keynote address at American Association for Higher Education Assessment Conference. Boston, MA.

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"Now Is the Summer of Our Discontent": Assessment Revisited

Lisa Brandom

The assessment program at John Brown University, which is a small comprehensive university on the border of northwest Arkansas and Oklahoma, is now entering into its second season of implementation, its summer. The springtime of the program occurred in the mid to late 1980s with a flowering flourish as the university's vice president of academic affairs led the initiative. He appointed a one-quarter-time associate dean for institutional research who also served as registrar and self-study coordinator to prepare for an upcoming North Central Association visit. The institution then went into an intense mode of preparing the assessment soil (by attending regional meetings to learn more about assessment of student learning). The next step involved fertilizing the soil (by organizing frequent meetings with the academic departments to ensure understanding of the directive),and, finally, working to produce healthy plants (by establishing appropriate assessment tools, evaluating the results, and improving student learning through curriculum and administrative changes).

The university is now some fifteen years into its assessment program and has recently completed an evaluation of its current status. The program is almost routine, but is the summer season of its growth cycle the right time to become complacent and simply wait for the harvest? What can a university do to keep the focus and edge on the improvement of student learning? As a small university, how can it keep the administrative costs of the program down with the influx of many additional competing financial needs? How can it continue to motivate faculty and students to take ownership of the program? Small universities such as ours do not have to become discontented or disheartened in the summertime of their programs, and healthy plants raised in the assessment climate do not have to droop and become a wasteland because of drought and lack of care. With some revitalized ideas, the assessment programs can move into autumn with confidence.

What can a small university do to keep the focus and edge on the improvement of student learning?

One of the ideas John Brown University has initiated in recent years is the creation of a yearly assessment summit on campus. For the past three years, on a cold autumn evening in November, various campus constituencies come together to consider assessment. They spend several hours together (rewarded with a Mexican dinner midway through the evening), examining the state of the assessment program and setting new goals for the current year.

Those in attendance include academic divisional chairs, student life representatives, the director of institutional research and assessment, enrollment and financial aid representatives, student leaders, and others. Prior to the meeting, the office of academic affairs circulates among the attendees a bound document containing all kinds of data for analysis and conclusions. Examples of these data include the university's priority goals, results of surveys such as the Cooperative Institutional Research Project (CIRP), the Student Satisfaction Inventory, and the National Survey of Student Engagement, as well as data on enrollment, retention, and graduation rates. So that the participants are not overwhelmed with too much data, each section of the document is preceded with a one-page executive summary of the results.

The meeting officially begins with an analysis of the specific action goals that were developed by the participants at the previous year's summit. The action goals are three assessment priorities for immediate focus. The three identified in 2000 were (1) retention and graduation rates, (2) academic quality and faculty/development scholarly activity, and (3) a need to review the university's assessment surveys and their use. Each participant completes a brief open-ended question related to the three action goals and responds to a series of statements related to each goal. The large group then discusses how well the university has accomplished the action goals from the previous year. It is then time to develop new action goals. The participants divide into small groups and use flip charts to develop three action goals for the new academic year. Each small group shares its suggestions and discusses them, and the large group chooses the final three for the university's attention in the immediate future.

Essentially, the summit provides camaraderie and a sense of shared ownership in the assessment program. As one of the nine principles of good practice for assessing student learning, the American Association of Higher Education recently stated:

> Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations—those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. (Astin et al., 2003)

The assessment summit gives the university a cost-efficient way to share assessment results and cooperatively develop new goals in an ongoing manner. Astin et al.(2003) also state as a principle that "Assessment works best when it is ongoing not episodic." The assessment summit provides a convenient vehicle for annual evaluation of its program.

How can we keep the administrative costs of the program down with the influx of many additional competing financial needs?

For small universities such as John Brown University, one of the key questions that has hovered like a bee in summertime is the cost of maintaining a quality assessment program. Many universities face uncertain finances in light of falling stock market prices, terrorism and war, and high unemployment levels. Student retention may fall; tuition is sure to rise; and enrollments may decline. More than ever, we must confront the economic realities.

Much research has been conducted on why assessment programs have not had more success in the past fifteen or so years. A recent search on the Internet for articles related to the words "assessment of student learning," resulted in 1,590,000 articles or references to the subject. According to just one of these articles, "Improving the Assessment of Student Learning" published in *Teaching Sociology* (Weiss et al., 2002), one problem universities must confront is that "doing good assessment does require time. Faculty members will inevitably resent having any time-significant task imposed on their workload without some corresponding reduction in other responsibilities" (p. 68). Other than giving faculty members released time, a costly endeavor, how can a university encourage them to stay involved in assessment? An answer for small universities such as ours is to "show them the money," to borrow a line from the film *Jerry McGuire*. In this case, however, the "money" is not monetary. It is in showing the faculty the intrinsic reward—the positive results of systematic and continuous improvement and the benefit to faculty members' own goals and objectives.

An example of how this works is in the English department of John Brown University. Each three years, faculty members within the department work to develop a three-year plan for assessment of its majors. These objectives, and the accompanying results of student assessment, are reviewed annually. The department employs the usual standardized tests as assessment tools for its majors, such as the Praxis test in education and the Major Field Achievement Test. It uses multiple addition tools as well, such as students' writing, their presentations at professional conferences, and videotaped exit interviews, as evidence of whether the objectives have been accomplished each year. In the past it used longitudinal methods such as tracing students' growth from their freshman through senior years.

When it comes time to review the objectives and results, the department has found that the summer provides an excellent time for a day-long retreat to accomplish these evaluations. The fellowship and the realization that shared goals of the department are indeed being met override any feelings of serious entrenchment upon faculty members' time. Other departments also use short retreats for the same purpose. No one person is responsible for departmental assessment; it is cost-efficient; and it is a shared responsibility.

How can we continue to motivate students and faculty to take ownership in the program?

Peter Ewell (1997), in his work on assessment of student learning, has concluded that many institutions do not possess a clear understanding of collegiate learning and that assessment is often done in a piecemeal fashion within the institution. Angelo (1999, pp. 3–4) further states that "most assessment efforts have resulted in little learning improvement because they have been implemented without a clear vision of what 'higher' or 'deeper' learning is and without an understanding of how assessment can promote such learning." It would seem that a possible answer to these dilemmas is the development of an ongoing, unified, across-the-campus plan. John Brown University's plan is three-pronged. One part involves the administration-led initiative of the assessment summit for communication of factual data relating to students' life goals and setting of the faculty's priority goals for assessment. The second involves the staff-led initiative focusing on collecting, analyzing, and sharing relevant data on the core curriculum. The third involves the faculty-up ownership of departmental objectives, the yearly examination of the results of assessment data, and the necessary changes in the curriculum to improve student learning, thereby achieving the closed loop that is vital in assessment. All three prongs of the program work simultaneously and systematically in three-year growth cycles. All constituencies work together collaboratively to create a network in which no one person or group feels pressure to produce without being sufficiently rewarded through released time or extra incentive pay.

Since John Brown University is just in the summer of its assessment program, it can only imagine the future challenges of the fall and winter. Perhaps a challenge will be to develop more outside roots in the surrounding community, making more public and visible the

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positive accomplishments of its alumni who represent the harvest of the university's assessment efforts. Perhaps that message needs to be communicated externally so that the university does not have to make continued apologies for being "the best kept secret in northwest Arkans[illegible]." Another future direction of assessment will perhaps be to network more with other universities in planning, sharing, and communicating innovative ideas in assessment that are emerging each day. The use of e-mail and the Internet is another cost-efficient way to share this information. Perhaps the future direction will be to encourage more scholarship within the university that pays more attention to the multiple ways in which teachers teach and students learn.

Small universities struggle with issues of staying on the cutting edge of assessment, working with small budgets set aside for the program and continually involving students and faculty without burdening them. Employing some simple, almost cost-free summits and day retreats can perhaps provide the continuing discussion and planning times needed to accomplish the objectives. The phrase "the summer of our discontent" is simply a reminder that contentment is not necessarily a positive. Institutions such as John Brown University must remain discontented as they seek ways to move to the next cycle of growth in academic excellence and effectiveness.

References

Angelo, Thomas A. 1999. Doing assessment as if learning matters most. *AAHE Bulletin* 52: 3–6.

Astin, Alexander W., et al. 2003. Assessment forum: Nine principles of good practice for assisting student learning. American Association for Higher Education. Available from <http://www.aahe.org/assessment/principl.htm>.

Ewell, Peter. 1997. Organizing for learning. *AAHE Bulletin* 49.

Weiss, Gregory L., et al. 2002. Improving the assessment of student learning: Advancing a research agenda in sociology. *Teaching Sociology*. January, 63–79.

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A Balancing Act: Engaging Faculty and Administration in University-Wide Assessment

Donald Carpenter and Badih Jawad

This presentation seeks to engage the audience in constructing a model for a university assessment program. The model developed by the audience will then be compared to the program implemented at Lawrence Technological University (LTU), where assessment of student learning is sustainable and is part of the university culture. The ultimate goal of the case study is for participants to adapt and implement the model for use at their home institutions.

The university-wide assessment committee was created in fall 2001 and consists of ten faculty representatives (one from each academic department on campus). In addition, the committee has two ex-officio members, the associate provost and the coordinator of institutional research. The associate provost serves as a consultant to the group and a liaison between the committee and the provost's office. The coordinator of institutional research provides data services and general assistance. The principal presenter, Donald Carpenter, Ph.D., is an assistant professor of civil engineering and an active member of the committee. The co-presenter, Badih Jawad, Ph.D., is an associate professor of mechanical engineering and the director of assessment for the university. The director of assessment serves as the chair of the assessment committee, and his responsibility is to make assessment of student learning part of the university culture.

The assessment committee, which meets biweekly, serves as a channel of communication between university departments and a forum for faculty suggestions on assessment issues. In addition to attending the regular meetings, the director of assessment and the ex-officio members meet once a semester with each faculty representative and their department chair to review departmental plans and assessment activities and discuss actions the department is planning for the upcoming semester and beyond. At the time of committee formation, the various departments on campus were at extremely different levels of tracking student learning. Some departments had never attempted any assessment tracking, while others had developed rather complex methods of assessment. This variety turned out to be a great situation for the committee because it allowed for an opportunity to combine the fresh ideas of newcomers with the experienced ideas of those departments that had been tracking student assessment for years. Numerous methods of assessment were introduced, including the concepts of direct and indirect measurements. An early study was conducted with the committee and the faculty in their departments to determine the level of implementation in the departments. Each department reviewed areas of culture, responsibility, support, and efficacy of assessment to give the committee an overview of the implementation levels throughout campus. While some departments were at the lowest level of activity; others were at a more advanced level.

One of the first tasks of the committee was to determine a focused plan for the year. It was agreed that assessment would initially be tracked at two levels—the university-wide level and the department level. The university-wide component followed Lawrence Technological University's educational goals of communication, development of analytical and critical thinking skills, teamwork, and leadership. The department level of assessment would be focused on goals and objectives of each department, which, in some cases, were aligned with accreditation boards.

The committee started with the LTU educational goals that were already in place. The educational goals consist of six main general educational requirements as well as seventeen specific skill areas in which graduates are to demonstrate. The committee recognized very quickly that it needed to narrow the scope of work and chose to concentrate on four specific skill areas:

- Effective verbal and written communication skills
- Critical thinking and problem-solving skills
- Teamwork
- Leadership

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Initially, assessment of written communication skills was chosen as our first university-wide assessment task. The committee realized that, in the case of Lawrence Tech students, writing should be assessed at two levels—as part of the general education requirements and core curriculum at the sophomore level, and as professional and technical writing at the end of the junior or senior year. The assessment of writing in conjunction with general education is performed by the department of humanities, social sciences and communication. The assessment is integrated in the writing, literature, history, and philosophy courses taught as part of the core curriculum. Random samples of student work are collected for the various courses at the freshmen and sophomore level and evaluated by a faculty team.

The majority of the committee's work in the first year was determining a method to review upper class students' professional and technical writing. Various methods of writing assessment were reviewed. Ultimately, the committee agreed to have student writing reviewed by a small team of faculty members from across the departments who are known to have exceptional writing skills themselves. This team will be responsible for reviewing a variety of student professional papers to determine the writing level of our students. Professional papers from students at the end of their junior and senior years, representing every undergraduate major on campus, will be collected and reviewed. Wanting to provide a general framework for the team to follow, the committee developed a writing rubric to establish a standard of grading for writing and to show the expectations of each grade.

In addition to the efforts in assessing written communication, each department worked toward departmental specific goals with the guidance of the respective committee member. The departments were asked to develop their goals and have them documented by the end of the academic year. The departments showed great initiative in their work, and a variety of assessment strategies were developed, ranging from student surveys and exit interviews to pre-testing and post-testing in specific courses. Another accomplishment of the assessment committee was the development of assessment week each semester. Lawrence Tech's assessment structure includes one week per semester that culminates with an assessment day full of scheduled events. The fall assessment week is focused on the evaluation of assessment results from the previous year and the actions to follow. During the fall assessment day, the faculty participated in program retreats and in a faculty symposium to share assessment practices and results. In the spring semester, the assessment week will be focused on the collection of student data. This is a focused time frame for faculty to collect a variety of data in the classroom as well as an opportunity for campus-wide surveys to be distributed.

All assessment committee members attended at least one conference related to assessment during the first year. Most of the committee went to Chicago in March 2002 to attend the shared conference of AAHE and the Higher Learning Commission, "Changing Institutional Priorities." During this workshop our committee had the opportunity to hear from other institutions and to learn many ways to improve our methods of assessment. In addition, the conference allowed ample opportunity to grow together as a team and to develop a capstone project. This capstone project gave us time to focus on goals, strategies, and indicators of successful student learning assessment. The conference was time well spent because it furnished ideas and suggestions from other universities that have been very successful with their assessment strategies. Some highlighted suggestions included sharing assessment methods with students at orientation and other student gatherings, starting with small plans and building upon them, and learning that each assessment method has strengths and weaknesses.

Although the first year of our assessment committee went well, the group still faced challenges. One of the first noticeable discrepancies came from the fact that Lawrence Tech is made up of several professional colleges with different expectations from their professional accreditation agencies (engineering, architecture, business management, and departments without professional accreditation). As a starting point, the committee prepared a chart showing the various agencies and the languages defined by those agencies (the Higher Learning Commission, FIDER, NAAB, ABET, IACBE, and ACBSP). It was immediately evident that we were all speaking different languages when trying to identify common goals among these diverse departments.

The committee members were dedicated in their pursuit of assessment of student learning. Every department made an effort to try various methods of assessment and to learn from the ideas of others on the committee. In addition to the dedicated work of the committee members, several positive factors led to our success. The administration provided a separate annual assessment budget to support assessment activities. The budget is used for a variety of items such as conference travel, educating faculty about assessment, consultant fees, and clerical or technical assistance for special projects. Technological tools, such as Blackboard, are available on campus to enhance communication between various constituents of the process. There was broad institutional support of the work of the assessment committee, as well as support of the assessment plan. Support came from all levels on campus. The president, provost, deans, and department chairs continually showed their support and contributed to the success of this committee.

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Broadening the Discussion: Using the Academic Assessment Process to Address a Variety of Institutional Priorities

Jacqueline Johnson and Robert Ferguson

Background

For the past three years the faculty at Buena Vista University (BVU) have been engaged in a process of reviewing our general education program and each of our majors. In May 2002 the faculty gave final approval to many of the major components of a new curriculum, central to which are eleven BVU objectives that are to be integrated throughout all facets of a student's education. During the summer following passage of the program, the assessment committee began working to develop a proposal for a new academic assessment plan to fit the new curriculum.

The assessment plan that has been developed envisions that the eleven BVU objectives will be addressed on a three-year rotating basis, beginning with three of the objectives this year. The basic strategy for data collection will be to identify existing senior-level courses in each major that contain assignments relevant to the objectives. Copies of the work from the students in those courses will be forwarded by the instructors to the office of institutional research, where they will be stripped of identifying information and pooled with work from other courses. A scientific sampling process will then reduce the student artifacts to a manageable number, and a faculty committee will assess the work using rubrics developed earlier in the year by faculty volunteers. The assessment committee will review the results, make them available to the university community, and use the annual beginning-of-the-year faculty workshop as a forum for initiating campus-wide discussions of the results and their implications.

Relationship to Other Institutional Issues

The central purpose of the assessment committee, of course, has been to develop and implement a plan for the collection of data that would allow us to gauge student academic success. What we did not anticipate was that the process would yield significant benefits even before any formal data were collected. In particular, three areas of concern have long been identifiable in the Buena Vista University campus culture:

1. Faculty attitudes regarding academic assessment have often ranged from apathy to distrust.
2. Several segments of our curriculum, including components of general education, have operated rather independently of one another, often with minimal coordination or little sense of how the components interact to create an overall academic experience for our students.
3. Communication between the faculty on the main campus and the faculty and staff members who operate our baccalaureate degree-completion programs in partnership with community colleges throughout the state of Iowa has not always been adequate.

The process of developing and implementing a new assessment program has led to discussions among faculty from all segments of the university. This has provided a mechanism for addressing these three areas of concern, all of which have already shown significant improvement in spite of the fact that we are only just beginning to collect formal assessment data. Each area and its relationship to the assessment plan will be discussed in turn.

☐ Faculty Skepticism

As has been the case at some other institutions, BVU faculty members have not been quick to embrace the assessment process. Some have seen assessment as irrelevant and hoped that it would go away, while others were more openly distrustful. Thus, as the assessment committee began its work, all members were very aware that acceptance of the plan would require it to be seen as both relevant and non-threatening. The committee therefore identified three principles to guide its deliberations.

1. Good assessment is designed as an integral part of the academic process, not as an artificial or intrusive add-on.
2. The intent of the process is to assess overall programs and BVU objectives, not individual courses, instructors, or students.
3. The new plan would represent a long-term commitment to thoughtful, high-quality assessment of student learning at Buena Vista University.

These principles are reflected throughout the plan. In particular, they led to the decision to draw primary assessment data from existing assignments in courses across the curriculum. This approach does not require significant additional work for instructors, and it ties assessment to the day-to-day academic life of the institution. Also, we elected to strip identifying information from the student work and then aggregate it across courses and majors, thus getting an overall profile of performance from students as they prepare to exit the institution without targeting individual instructors or courses.

One significant measure of the acceptance of this approach came during the faculty meeting at which the plan was presented prior to submission to the governance process. That meeting saw widespread discussion (as opposed to apathy), capped by the comment from one long-term skeptic that "I think we can do this!" More concrete evidence for the plan's acceptance can be seen in the fact that nearly thirty people volunteered to participate in a weekend workshop to develop rubrics for the first three BVU objectives, and we have met little or no resistance when soliciting faculty participation to identify assignments and gather data.

☐ **Minimal Coordination of Curricular Components**

The BVU objectives are intended to be integrated throughout all aspects of a student's experience, including general education, the majors, and, to some extent, the extracurricular programs. The simple act of identifying these objectives has gone a long way by itself toward identifying points of connection and commonality among otherwise diverse programs. Equally important, however, has been the development of assessment plans for the objectives. For example, the academic affairs committee of the faculty senate has asked all instructors offering courses within general education to submit a list of the specific BVU objectives addressed by the course, along with an indication of how those objectives will be assessed during the semester. This requirement, in turn, has led to several significant discussions about the interrelationships among courses. This may seem like a small step for some institutions, but to have it occur widely across divisional boundaries is a non-trivial accomplishment on our campus.

☐ **Integration of Programs Between the Main Campus and the Centers**

For more than twenty-five years, Buena Vista has provided community college graduates across Iowa with the opportunity to complete their undergraduate degrees by taking two years of additional coursework at our centers, most of which are located on the community college campuses. All students, regardless of whether they are enrolled at the main campus or at a center, are expected to complete essentially the same requirements, and they receive the same degrees. Academic deans and faculty from the main campus design the programs and approve the adjunct instructors at the centers. Nonetheless, coordinating the operation of the programs and courses among the various locations has sometimes been difficult. Developing the new assessment plan has proven to be an ideal mechanism for increasing the dialogue and degree of coordination among the faculty and staff who actually deliver the programs at all of those sites. Several examples can be cited. First, the dean of centers is a full member of the assessment committee, so her perspective and concerns have been an integral part of the overall discussion. Also, the chair of the assessment committee and the dean of centers have used this as an opportunity to travel around the state to discuss the assessment plan and its implementation with center faculty and staff. Finally, several center faculty and staff members participated alongside main campus faculty in a recent weekend workshop during which they developed the rubrics to be applied to the student work. Academic assessment is thus becoming one important mechanism driving increased discussion and coordination among the centers and main campus programs.

Conclusions

There is no question that assessment of student learning is a vital component of any academic program in its own right. Students, faculty, administrators, and other stakeholders need, and deserve, to know how well curricular goals are being accomplished, and curricular improvement hinges on good assessment data. In addition, Buena Vista University has discovered that an appropriately designed assessment plan can be of real value in addressing wider institutional issues. Academic assessment holds the potential to become a focal point around which many constituencies can converge and thereby find common ground. Articulation, integration and intentionality are significant characteristics in any good curriculum, and assessment can be the key organizing mechanism to further all of these goals.

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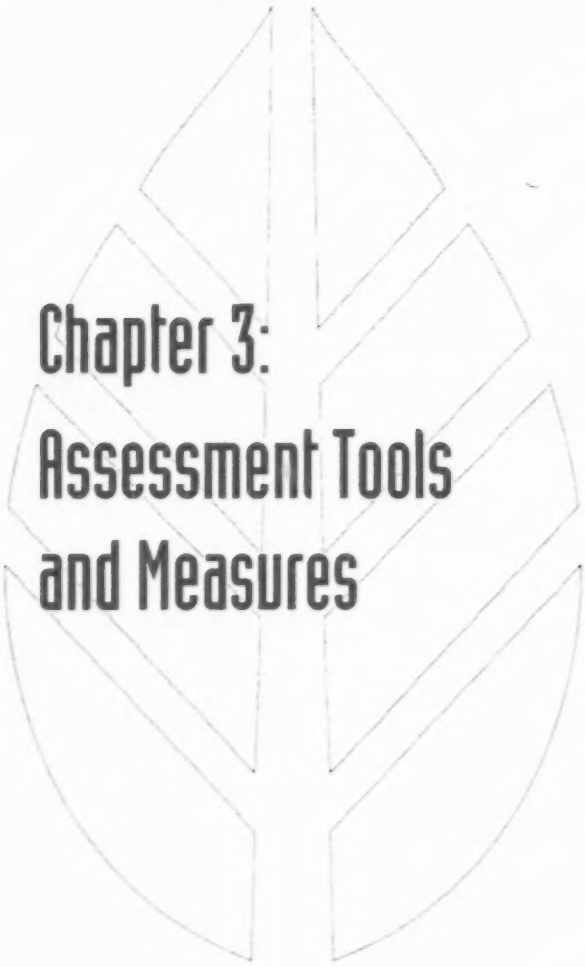

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Living Beyond Our Means: Analysis of Standardized Test Data

John C. Simonson and George E. Smith

Standardized tests have long played a significant role in assessment strategies at most colleges and universities. As part of the assessment landscape, the results of such tests have been used in institutional admissions procedures, as internal benchmarks for measuring added value, as input for curricular and administrative decision making, and for both internal and external comparisons of students' abilities in mathematics, writing, critical thinking, and other areas.

The purpose of this paper is to provide insight into strategies for analyzing the results of such standardized tests. Based on activities at the University of Wisconsin-Platteville (UW-P) over the past decade, the paper will suggest methods of data analysis beyond the simple institutional averages often provided with standardized test results.

Brief History of Assessment on Campus

The University of Wisconsin-Platteville is one of thirteen four-year campuses within the University of Wisconsin System. Among the institution's assessment activities of the past five or six years have been development and testing of a home-grown instrument in mathematics, portfolio development in writing, creation of a campus "assessment journal," and interdisciplinary assessment discussions across the various areas of the liberal arts curriculum.

Program-specific assessment activities predated campus-wide efforts. For example, UW-P's Department of Economics studied students' critical thinking skills in a series of pedagogical experiments in 1987. In the mid-1980s, the College of Engineering participated in a UW System-funded pilot assessment initiative that provided a foundation for developing program-specific assessments.

In the early 1990s, UW-Platteville began to participate in UW System-wide assessment of writing and mathematics skills. In addition, UW-P also studied students' critical thinking skills. UW System administration mandated use of ACT CAAP for this assessment. Prior to this directive, UW-Platteville had considered other standardized instruments for conducting its own local assessment.

The authors were among the faculty and administrators concerned about such systematic assessment of UW-Platteville students. One result of this concern was the development of an institutional assessment plan (1995) that codified the university's assessment philosophy, goals, strategies, policies, and procedures into a single document. This plan collected input on assessment activities from campus academic and administrative units.

In addition, this plan created an assessment oversight committee (AOC) charged with the responsibility of coordinating campus assessment activities and serving as a resource for academic and administrative units interested in particular assessment projects. The plan also articulated campus procedures for certain assessment activities (e.g., biennial administration of ACT CAAP). Finally, the plan promoted the development of home-grown assessment instruments, supported in part by the establishment of an assessment activity grant program to fund such activities.

Assessment activities were divided into three general areas: competencies, liberal arts, and program assessments. A fourth component—student life—was added when UW-Platteville updated its campus assessment plan in 2002.

Administration of ACT CAAP

In part, the UW System decision to administer ACT CAAP at all four-year institutions prompted UW-Platteville to focus on specific procedures for managing this effort locally. The population for this assessment was identified as "rising juniors," that is, students who had earned 45 to 59 academic credits. The initial sample of students was drawn at the system level, and individual campuses were directed to administer the CAAP tests in writing and mathematical skills to these students. In subsequent administrations of ACT CAAP, individual campuses were allowed to select the random sample on a local level.

By benchmarking test results, UW-Platteville has been able to study both local and national trends in writing and mathematical skills. Methodological differences between 1992—the year in which UW System selected the random sample—and subsequent years preclude direct comparisons with 1992 results. However, since the mid-1990s UW-Platteville has been able to replicate its methodology to the extent that results can be compared effectively.

For the 2001 administration of ACT CAAP, selection of an appropriate sample size was based on the standard deviation of 1998 results.[1] A similar projection was made in 1998, based on the 1996 results, and the 1996 projection was based on the 1994 results. The assessment team was able to determine the size of the initial sample required to yield sufficient response by using the following formula (with a 95 percent confidence level).

$$n = \frac{t^2 \times s^2}{e^2}$$

where **n** is the minimum sample size needed

t is the number of standard deviations in the sampling distribution (2) implied by the selected confidence level of 95 percent

s is the estimated standard deviation of the variation in the population

e is the acceptable error

The response rate of students selected for the random sample was also projected, based on previous years' efforts. Anticipating an approximate response rate of 50 percent, the assessment team drew a random sample that was twice as large as the minimum size required to yield meaningful results. For the 2001 administration of ACT CAAP, it was calculated that minimum respective samples of 45 and 33 were required for the writing skills test and mathematical skills test. UW-Platteville also administered its home-grown mathematics exam at the same time, so participants were randomly directed to one of three testing rooms on each testing day.

A random sample of 271 "rising juniors" was selected from among 507 students in the population of second-semester sophomores. Names and addresses of the selected students were provided by the office of the registrar, and each student received a personal letter from the provost that stressed the importance of the testing and requested the recipient's participation. Students were directed to either call the provost's secretary or return an enclosed response card to indicate which of four tests dates was preferred. Based on these calls and response cards, a follow-up letter was sent to confirm the time, date, and location of testing.

Previous attempts to increase response rates among random samples had determined that incentives (e.g., pizza, preferential registration treatment) were ineffective, but that personal contact from campus faculty and administrators *did* yield higher response rates. Therefore, the sample of 271 students was divided into ten lists of 27 names, and each member of the assessment team was responsible for contacting his or her students by phone, e-mail, or both. Team members were updated about which of their students had responded to the initial contact from the provost. The initial letters were mailed approximately three weeks before the tests dates (either 4 P.M. or 6 P.M. administration times on different days of the week). Follow-up contacts by the assessment team took about two weeks. As a result, 109 students participated in the ACT CAAP and local mathematics test (a response rate of 40.2 percent). Test administration took less than an hour each day, with individual examination rooms supervised by a proctor and one floating coordinator.

The completed CAAP writing and mathematics exams were subsequently sent to ACT fc tabulation, and results were returned to the campus several weeks later. Letters were sent to participants, thanking them for their participation and providing them with their individual scores, UW-Platteville averages, and the national norms.

Data Analysis

ACT CAAP results were analyzed with a regression model that identified statistically significant relationships between a variety of independent variables and students' test data (dependent variable). In its original design, the regression model employed forty variables in its analysis. Variables that proved to be statistically insignificant were eventually deleted from the model. Some of the variables determined to be statistically significant in impacting test results were analyzed in more detail; however, the assessment team noted that such statistical significance did *not* necessarily imply a *causal* relationship. Total variation in a student's performance was the sum of the individual variables' impact, plus "chance" (for inferential statistics resulting from a random sample).

Three groups of variables were selected for inclusion in the regression model. The first group attempted to control for students' skill levels upon entering UW-Platteville. Included in this group were variables such as each student's score on the entering ACT writing and mathematics tests, the score on the statewide writing and mathematics tests, and whether the student "tested out" of one or more composition classes.

The second group of variables attempted to control for a student's ability, motivation, and other personal and environmental factors thought to influence learning. Included in this group were variables such as cumulative grade point average, total credits earned, major college (one of three on campus), gender, and whether the student transferred to UW-Platteville.

The third group of variables attempted to control for policy variables, that is, factors related to the educational experience at UW-Platteville. Included in this group was consideration of whether the student had completed coursework in various disciplines (e.g., English, mathematics, philosophy, psychology, history).

Based on previous analyses of ACT CAAP data, several variables were eliminated from the regression model because they were found to have no statistical significance. Among these variables were number of English credits completed in high school, high school size, and percentile rank in high school.

Initial administrations of the regression model required the assessment team to input many of the variables by hand. Subsequent administrations of the regression model employed the repurposing of data that existed within campus databases (e.g., PeopleSoft® and DataMart®). The assessment team employed MiniTab® software in running the regression model. While the "rising juniors" sample was *not* used in administering the ACT CAAP tests for critical thinking skills, the same regression model *was* employed in analyzing students' abilities to think critically.

Separate reports were prepared for writing skills, mathematical skills, and critical thinking skills each year. These reports analyzed the most recent administration of ACT CAAP, compared results to those of previous years, and identified trends in both local and national data. Summary reports were provided to the assessment oversight committee, undergraduate curriculum commission, academic planning council, and administration (provost, deans, department chairs, et al.).

Findings

Without a lengthy explanation of the statistical procedures involved, suffice it to say that variables analyzed were statistically significant, and some variables were not statistically significant. Of those variables that were significant, some were significant at the .05 level, some at the .01 level, and some at the .001 level. Some variables were significant for one test, but not for another. Most of the statistically significant variables followed a pattern from one year's administration of ACT CAAP to another year's administration of ACT CAAP.

The following patterns emerged as a result of regression analyses of the CAAP data over the last few years. Some of these may include multicolinearity (e.g., entering ACT English scores and results on the statewide English placement test), which complicated analysis of results.

- On the writing skills exam, students in the College of Liberal Arts and Education scored higher than students in either the College of Engineering, Mathematics and Science or the College of Business, Industry, Life Science and Agriculture.
- On the mathematics skills exam, students in the College of Engineering, Mathematics and Science scored higher than students in either of the other two colleges.
- Less significant in predicting performance on the writing skills exam were cumulative grade point average and entering ACT English score.
- There was a negative correlation (although not statistically significant) between having experienced the second freshman composition course and performance on the CAAP writing skills exam. In part, this phenomenon might be explained by the fact that 12 percent of the participants had "tested out" of the second composition course, possibly suggesting that they were significantly better writers than students who had enrolled in the second freshman composition class.
- On the critical thinking exam (administered to a different sample, but with results analyzed with the same regression model), the only statistically significant variable—and then only at the .05 level—was whether the student had enrolled in a philosophy course. Initial interpretation might have suggested that students become better critical thinkers as a *result* of taking philosophy courses. But another plausible explanation was that students who were already good critical thinkers *sought out* philosophy classes because they enjoyed the interactions in such a course. This was a good example of how correlation does not *prove* causality.
- Freshman performance on the statewide mathematics placement test was statistically significant in predicting performance on the CAAP math test for "rising juniors." Total mathematics credits earned were also significant (.05 level) in impacting performance. As a net result, students from the College of Engineering, Mathematics and Science scored significantly higher than did students from the other two colleges on campus.

- Less significant in predicting CAAP mathematics performance were variables of gender and cumulative grade point average. Given the skewed gender distribution (significantly more males) in the College of Engineering, Mathematics and Science, this pattern also seems reasonable in explaining CAAP results.
- Given the "lead program" role played by UW-Platteville's engineering program, it was not surprising to find that UW-P's mean on the CAAP mathematics test was usually much higher than the national norm.
- A significant increase in CAAP writing scores between 1994 and 1996 came on the heels of a shift of the pedagogical approach in the freshman composition courses.

While not exhaustive, these results suggest that regression analysis of ACT CAAP data can yield valuable insights into students' performance on standardized tests. As input for curricular and other administration decision making, such analysis offers new perspectives and confirmation of previous assumptions regarding our students.

Conclusion

While standardized tests are not a panacea for all institutional problems, the analysis of data can provide new ways of looking at students' abilities and performance. Software programs designed to minimize calculations formerly conducted by hand make regression analysis easier to perform today. And the growing use of databases of student information makes it much easier to access a wide range of variables, often through the repurposing of data.

Regression analysis can be a cornerstone in institutional analysis of standardized test data. Results of such analysis can offer new opportunities for institutional research, as well as provide greater insight into predicting student performance at the college level.

Note

[1]For example, see Morris Hamburg, *Statistical Analysis for Decision Making* (San Diego: Harcourt, Brace, Jovanovich, Publishers, 1991), pp. 300–302.

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A Handbook of Assessment for the Layperson

Kenneth R. Ryalls

Initial Assessment Efforts

For the past five years I have been chair of the assessment committee at my college, and in that role I have attended many conferences on assessment. During those conferences I have learned much about the rules and practice of assessment on a theoretical level, but I found that my assessment education rarely addressed the more practical question of implementation. Assessment discussions almost always left me with questions: "Yes, but *how* do I realistically implement these valuable and worthwhile ideas? What are the difficulties faced by the person responsible for the coordination of assessment? How do I educate (and motivate) the program directors, division chairs, and area supervisors to be willing and able to actually do the assessment?" Unfortunately, I never got answers before embarking on the challenge of implementing meaningful and ongoing college-wide assessment practices, and I had to learn through trial-and-error about the realistic challenges of such a task.

One of the biggest challenges that institutions face when working on assessment is to get faculty buy-in to the process, because faculty often see assessment as an unnecessary (and potentially punitive) crosscheck of their work. To increase ownership of the assessment process amongst faculty, many colleges (mine included) decide to put assessment directly into the hands of the faculty, letting each program of study design and implement its own assessment practices. In this way, program directors (with the assistance of their faculty) determine what is important in their own programs and then design a system of how to assess those goals on a program-by-program basis, rather than being dictated to by a centralized governing body of assessment. (Note: For ease of communication, I will refer to those responsible for assessment as "directors," rather than creating an exhaustive list of possibilities, such as program chairs, division chairs, managers, deans, or VPs. I also maintain the focus on assessment of academic programs for simplicity, although the principles discussed here extend beyond the academic area.) Decentralization of the assessment process is a great way to achieve greater faculty commitment to assessment, but this strategy has an inherent problem associated with it: the more decentralized the assessment process gets, the less control the assessment "czar" at your institution has over the assessment efforts. Perhaps even more difficult (and costly to the institution) is that an increase in people directly responsible for assessment means an increase in people who need to be fully trained in the art of assessment. Couple that problem with natural turnover amongst directors, and a major problem arises. Even with the best of intentions (which is often not the case), assessment efforts languish without stable and consistent guidance across time.

So the obvious response is to centralize assessment efforts and make one person or office responsible for the assessment of all academic programs on campus. But then you have people responsible for assessing learning outcomes in programs that they arguably know nothing about, and a faculty that is inherently mistrustful of an outsider coming in and measuring performance. If your institution is anything like mine, you cannot (and probably should not) pay a full-time person to coordinate all assessment efforts on campus. So what's the answer? This is a question I have struggled with during my first four years as the coordinator of assessment on campus, implementing many potential solutions and learning firsthand what works and what does not. I cannot give you *the* answer, but I can give you *an* answer—and so far, the answer that we adopted seems to be working well. The answer is based on a few fundamental assessment truths:

- The assessment committee needs real authority.
- Those responsible for assessment need readily available assessment education.
- Basic assessment procedures need to be standardized across programs.

The Need for Authority

The first truth does not relate directly to the *Handbook*. However, I believe that it is a truth worth mentioning because it was the most painful to learn, and it is necessary to know if the *Handbook* is to have any real impact. My initial approach to assessment was guided

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by a naive belief that directors would be more than willing to put in the necessary work if I could convince them that assessment was a worthwhile endeavor. As any competent manager knows, there will never be great love for a system whose purpose is to show employees where they are coming up short, even if the employees truly believe it is a good idea. It is also difficult from a managerial perspective to motivate people to put in extra time and effort out of the goodness of their hearts. An additional problem at our college was that our assessment committee was a faculty committee and therefore did not have any real authority over how assessment was done. Rather, our role as a committee was to suggest improvements on a yearly basis and try to affect change through that yearly feedback. We would then hope that the changes were indeed being made over the course of the year, a process my boss described as "touching" when he first came to our college. Needless to say, suggested changes from the assessment committee were often ignored; similar plans were handed in for review the next year; and similar feedback memos would again be sent to the program directors, requesting the same changes as the previous year. Change was glacial at best.

To combat this problem, an assessment committee needs teeth in the form of true authority. The approach our vice president of academic affairs (VPAA) adopted was to make the assessment committee his own, rather than a faculty committee. Because we report directly to him, memos sent by the committee are now bolstered by the authority of the VPAA, which makes all the difference in affecting change. No longer does the assessment committee need to wait a year to see if suggestions have been followed. Instead, our memos address specific changes that need to be made, along with a date by which the changes must be made. The assessment committee can now affect fairly rapid change, bringing even the weakest plans up to a basic level of competence within a year.

Educating the Masses: The Birth of the Handbook

Once effective assessment governance is in place, the burden of actually doing the assessment falls upon the directors. If your college is similar to mine, you will find that most of your directors have good hearts and the best of intentions about seeing the assessment process through. What is lacking is the knowledge to do it. At the initial stages of design, assessment is a difficult and complicated process, especially for a person with little formal training. Many colleges have thirty or more program directors, and the task of quickly and easily bringing them all up to speed becomes critical to the success of the assessment effort. Our institution initially tried to train the assessors with in-service meetings offered once or twice a year, but that approach has some problems associated with it. To begin with, in-service is often a lecture, and people do not come out of the meetings with perfect retention of information. You can try to aid memory by providing handouts to support your lecture, but those handouts are often incomplete and end up being lost or thrown away. Common handouts include the standard "Assessment Cycle," a bulleted list of the required components of assessment according to the Higher Learning Commission, and perhaps contact information for the members of the assessment committee. Great information, to be sure, but certainly not enough to let your directors hit the ground running. In addition, in-services are usually offered only once a year, yet personnel and responsibilities are constantly in flux. I continually ran into the problem of how to train the new directors without losing a year of assessment in the process. Although face-to-face meetings can solve the problem, my main function on my campus is not coordination of assessment, and time constraints limit how many personalized training sessions I can provide. After a few years of trying to keep assessment efforts going, Truth Two became increasingly evident: There has to be a comprehensive ongoing system of assessment education in place. What I needed was an assessment primer to distribute to anyone who needed to know the basics of assessment, and needed to know them immediately. I was betting that the time it would take to write such a primer would be offset by the time savings it would provide in the future. Thus, the *Handbook* was born.

Elements of the Handbook

Through experience, I knew what parts of assessment directors found particularly difficult, so it was fairly easy to generate a table of contents for the *Handbook*. Any useful handbook would need

- **An overview of the assessment process.** Before getting started, all assessors need to know what is expected of them. How does the process of assessment work? Why are we doing it? When are reports due? Who reviews them? This section is specific in expectations and has a clearly defined timetable of assessment, along with identification of the specific reports that are expected during the course of each year (summary, assessment report, and year-end report).

- **The basic requirements of a good assessment plan.** Although directors should have leeway in designing their assessment plans, there are basic requirements for every plan. For example, program goals should flow from the program's purposes, which should in turn flow from the institution's mission. But unless someone is very knowledgeable about assessment, how could we possibly expect the average director to have an understanding of that process? Rules and requirements that are second nature to those of us immersed in assessment are completely foreign to the average person and need to be specifically identified.

- **General advice.** Every handbook should have a section like this, because it provides a place to record and pass on those often unwritten rules of assessment. Experience breeds wisdom, yet we rarely take the time to record lessons learned so that others

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may benefit from the painful lessons that we've learned. Yet experiential knowledge is often more valuable than the official information found in guidelines and instructions, and it should be communicated. For example, one of the common sins committed when beginning the assessment process is to make the plan unnecessarily complicated. It is a natural mistake, because once directors start to list the goals of their program, they tend to create a list of all of the hopes and dreams they have for their students. I have seen preliminary plans that have fifteen or more goals for students, which necessarily leads to a plan of assessment for all of those lofty aspirations. Obviously, one director is probably not going to be able to actively manage the assessment of fifteen different goals. Therefore, the first bit of advice given in the Handbook is to keep the plan as simple as possible. I also use this section to address common complaints associated with assessment, such as the complaint that assessment is unnecessary busywork. When directors realize that a program is much more likely to get funding for a needed item if the request is supported by assessment data, the value of assessment suddenly becomes clear.

- **Construction of measurable goals.** Each program should have a mission and/or purposes statement, and the goals of the program should flow out of that statement. The creation of goals sounds fairly simple, but it is often difficult for directors because first attempts at mission statements tend to become unnecessarily comprehensive and cumbersome. In addition, first attempts at construction of program goals are almost never objective and measurable, leading to frustration when the director tries to design the proper tool for assessment. When they are provided with a step-by-step guide on the writing of mission, purposes, and goals, along with specific examples illustrating each step, directors have a much less painful time designing their own goals.

- **Catalog of available tools of assessment.** One of the most common questions I get, time and time again, is how to assess the more subjective goals. Much of what we do as educators is abstract—ideas such as critical thinking, effective communication, and college-level skills are very difficult to measure. But difficult does not mean impossible, which is the claim of many directors. When the director of the art program says that one of his goals is to make sure that all students have an aesthetic appreciation of modern art, then says that there is no way to assess aesthetic appreciation, the entire attempt at assessment grinds to a halt. A good handbook should identify the ways that we could possibly measure appreciation (such as an expert's review of the student's final paper on modern art), and help him to see that it is indeed possible to do so. The tool catalog also points out the pros and cons of each available assessment tool so that the assessor can make sound decisions about which tool to employ.

- **Effective use of data.** Because I am by training a social scientist I have a fairly strong understanding of the use of data, especially data that contain a lot of variability and fluctuation over time. However, I find that many directors tend not to have the background necessary to make data-based decisions in a cautious and rational way. In fact, most of my faculty colleagues lie in one of two camps: those who believe data are useless, and those who believe that data never lie. So the reaction to negative data collected is either to ignore the information because it is wrong, or to change our entire approach to education because the ship is sinking. The truth is that data can be useful only if interpreted correctly, and the goal in this section of the Handbook is to educate directors on the wise use of data. This section addresses the options available to the director, so that we are neither frozen by inertia nor prone to knee-jerk reactions to every random fluctuation of data that we record.

- **Brevity.** A useful handbook would also need to be brief. Assessment is rarely anyone's full-time job, so no one wants to read a hundred-page handbook on proper assessment techniques. My goal was to create a comprehensive handbook that was brief and easy-to-read, and communicated all that I knew about basic assessment practices. Currently, the entire Handbook is thirty-three pages long, including examples and templates. The meat of the Handbook, though, is only fifteen pages long—a digestible size for the average reader.

- **An assessment report template.** Truth Three (the need for standardization of assessment practices) arose out of necessity. There was no way I could provide a brief and painless primer on assessment if there wasn't some standard that all directors were required to follow. With a standard assessment reporting style required of all programs, I could be much more specific in describing how assessment is done. An added bonus of a standardized assessment reporting style is that it is much easier for the assessment committee to review, as all reports look identical in content and form.

- **A complete example of a quality assessment report.** Finally, there is nothing more helpful to a first-time assessor than a complete working example of what is expected. Contained within the Handbook are the assessment summary, assessment report, and year-end report of a fictitious interior design program. A fictitious program was used deliberately, so that all directors could see the report through eyes free of expectations. If an existing program were chosen as an example, there was potential for the directors in disciplines similar to that program to feel obligated to make their assessment report identical to the example.

Initial Results

The *Handbook* was adopted at the start of the 2002–2003 academic year, and so far the initial results have been quite encouraging. Those directors who have taken the time to read the *Handbook* have made remarkable progress in the construction of a viable

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assessment plan. Many of the directors who had submitted weak assessment reports in the past have already submitted clear, concise assessment plans for this year. Feedback on the *Handbook* from directors has also been quite positive, and one actually suggested that I submit the *Handbook* for presentation or publication (a suggestion I took to heart). However, the *Handbook* is not a panacea for all problems we have had in the past. There is still resistance to the assessment effort from some of the directors, resulting in late or incomplete submission of plans. But the *Handbook* does provide a common point of reference when communicating with the stragglers, because I can now provide instant feedback and refer the director to the specific page that fully explains the process to follow. With the authority of the vice president's office supporting the assessment committee, we can get turnaround and a plan's resubmission within weeks of the request. Finally, like assessment itself, the *Handbook* is a continually changing document, and will shift in scope and content as dictated by the experiences of those using it. Hopefully, it will continue to have a positive impact on the assessment process at my institution for many years to come.

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Activating Assessment of Student Learning: A Systematic and Systemic Approach

Judith Neill and Jeanne Williams

Context

Moving from *plans* for assessing student academic achievement to *action* and *results* presents many challenges for colleges committed to a process improvement philosophy. Tools that support the entire cycle of planning, delivery, assessment, reflection, and continuous improvement can play a key role in effective deployment and documentation.

Blackhawk Technical College (BTC) in Janesville, Wisconsin, completed its on-site review for reaffirmation of accreditation in March 2000. As BTC faculty and staff worked to implement the review team's recommendations, they recognized the need to think differently about how they could use technology to support and document the process. The Higher Learning Commission requested a progress report by July 2002, giving BTC a window of opportunity to develop the reflection and continuous improvement phases of the assessment cycle. The Commission approved the progress BTC reported in its July 2002 follow-up report.

Critical to the completion of BTC's student outcome assessment plan was interpretation and use of the "Levels of Implementation" proposed by Commission staff liaison Cecilia López, as well as a matrix tool developed and used to determine when learning outcomes are assessed in the program cycle. Staff at BTC provided instructors with opportunities for professional development and clear communication about the purpose of these tools for enhancing the institution's plan and follow-through activities to move forward and put the plan into place.

Beginning in 1993, the sixteen colleges that make up the Wisconsin Technical College System (WTCS) collaborated to develop the Worldwide Instructional Design System (WIDS), an outcomes-driven learning design model, software, and professional development program based on research and best practice. To that end, frontline teachers and learning designers continue to design, implement, and continually improve WIDS. (From 1993 to 2001, WIDS was known as the Wisconsin Instructional Design System.)

BTC has been an active partner in the development and continuous improvement of WIDS since its inception. At the time of its on-site review in March 2000, the college had made significant progress in using the WIDS model and software to develop college-wide core abilities, program outcomes and measures, and course-level competencies supported by performance standards and rubrics or checklists.

As staff began to accumulate and analyze data for the report, BTC simultaneously explored systems that would support instructors and administrators in reporting assessment data and results, and assist the institution in getting its arms around the large volume of information that is generated in the assessment process. At this time BTC administration made a decision to expand their toolbox by adding TracDat Assessment Management software, a Web-based software package that can be accessed by administrators and instructors without regard to location and time. The application provides a central location and tool for documenting and reflecting on implications for continuous improvement, and actions taken in response to the reflection.

BTC uses SCT Banner as their enterprise-level software system for managing courses, registration, and student services. By envisioning a way to put WIDS, TracDat, and SCT Banner together, BTC is attempting to implement a seamless approach to an integrated assessment process.

The Underlying Model

Recognizing the need to establish a framework for thinking, communicating about, implementing, and reflecting on learning and assessment, the Wisconsin Technical College System crafted a model depicting the constructs and the process. While acknowledging that an effective framework may take many forms, they concluded that a clearly defined, consistent framework would be helpful in moving forward and sustaining the process. The resulting model is based on proven research, examples of excellent practice, and

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input from frontline educational leaders. Though it is unique in detail and terminology, it represents a synthesis of principles and constructs of instructional systems design (ISD); competency or performance-based learning; and learning-centered teaching, learning, and assessment.

To grasp a quick overview of the model, think in terms of four concentric circles. In the center is "WHO," representing the question, "Who are my learners, and what are their learning needs?" The next circle is "WHAT," representing the question, "What do my learners need to be able to do as a result of this learning experience (e.g., course or lesson), and how does what they learn here need to relate to a broader context (e.g., program, major, or degree)?" The third circle is "WHEN," representing the question, "How will my learners and I know when they have learned what they needed to learn?" The outermost circle is "HOW," representing the question, "How can the learners and I best meet the goals set by WHAT?"

As with most working models, there are more complex layers and unique terms to describe them. Those more salient to understanding the assessment process in terms of the WIDS model differentiate between varying levels or layers of learning outcomes:

- **Core abilities** are macro outcomes made up of *transferable* skills, attitudes, and abilities to be mastered by learners completing a sustained course of study such as a program, major, or degree. Though they will be partially learned and assessed at the course or lesson level, core abilities go beyond a specific course. They are integrated throughout the learning experience, and are often determined at the organizational level. A group of core abilities is derived from the organization's mission and purpose.

- **General education outcomes** are macro outcomes made up of *general education* (academic foundation) skills, knowledge, and attitudes to be mastered by learners completing a program or degree. Like core abilities, general education outcomes are partially learned and assessed at the course or lesson level, but usually go beyond a specific course. A group of general education outcomes generally pertains to a degree level such as bachelor's degree, associate degree, technical diploma, or certificate, or to a program.

- **Program outcomes** are macro outcomes made up of *field-specific* skills, attitudes, and abilities to be mastered by learners completing a program or major course of study. Like core abilities and general education outcomes, program outcomes will be partially learned and assessed at the course or lesson level and go beyond a specific course. A group of program outcomes pertains to an entire program or major.

- **Competencies** are major skills, knowledge, or attitudes that are measurable and observable. When combined with performance standards (criteria and conditions), they equate to Higher Learning Commission "measurable objectives." Competencies may be academic or field-specific. They are fully learned and assessed at the lesson or course level. To show that a specific competency addresses a macro learning outcome (or inversely, to show that a macro learning outcome is embedded in a competency), designers *link* the macro learning outcome to the competency with the intent that it will be learned and assessed in conjunction with the competency.

Assessment is the process of establishing learning outcomes that meet the learners' needs (WHAT), determining whether they have met them (WHEN), documenting those results, and reflecting on how to continually improve the process of teaching, learning, and assessing. The purpose of the assessment process is to continually improve and document or credential learning. The WIDS model enhances the assessment process by providing a framework that supports thoughtful planning; communication to all stakeholders of defined measurable outcomes at the beginning of the teaching and learning process; deployment of valid, reliable, and fair assessment strategies; informed reflection on the results; and continuous improvement of teaching, learning, and assessment. A key feature of the WIDS model is the links that are established between outcomes learned at the lesson and course levels with broader learning outcomes representing complex, integrated skills and abilities learned during the course of a sustained learning experience (e.g., program, major, or degree).

Software Toolbox

The WIDS software provides the front-end instructional design tools, while TracDat offers tools for recording, organizing, analyzing, and reporting assessment data that support reflection and continual improvement. BTC employs SCT Banner enterprise system as the backbone data management structure for the college. SCT has recently partnered with Nuventive—the company that developed the TracDat software. This new partnership presents an opportunity for BTC to integrate data from the administrative data structure into the learning and assessment systems that the institution is putting into place.

The vision is to be able to bring components designed using the WIDS model and software, and data currently residing in the administrative enterprise system, into TracDat in order to manage the complete plan-do-check-act cycle of assessment that results in continuous improvement of teaching and learning. At this point, BTC is engaged in the early stages of deployment, and staff members are transferring data among the three software packages manually.

- The **WIDS learning Design** software features three distinct modules (Program Design, Learning (course) Design, and DACUM) that can be used independently or in conjunction with one another. Designed to assist teachers and instructional designers with the front-end planning of learning and assessment, it provides a consistent model; design templates; and libraries of outcomes, learning strategies, and assessments, along with context-sensitive coaching. Output, published in Microsoft Word, HTML, or rich text format includes learning plans (modules), teaching plans, complete syllabi, outcome summaries, program designs, DACUM charts, assessment/outcomes matrices, and many others. WIDS tools support important parts of the plan-do-check-act elements of the cycle, while the teacher further draws this circle by deploying these elements on the frontline learning environment and reflecting on the results.
- **TracDat** is a software solution for managing the academic assessment process. Designed to support all phases of the assessment process, TracDat facilitates the use of assessment data for planning and improvement. By supporting development of assessment plans and the identification of program strengths and weaknesses and recording corrective actions and follow-up results, it documents the impact of assessment on academic programs. TracDat plays an important role in completing the plan-do-check-act cycle by integrating intended learning outcomes designed in WIDS and student data that currently exist within the enterprise system with assessment plans and results documented in TracDat.
- **SCT Banner** is an enterprise-level software suite that provides applications for student information, advancement, human resources, financial aid, faculty and advisers, and finance.

Reflections

Colleges that strive to live by learning-centered principles must address many challenges and issues. The ability to move from *plans* for assessing student academic achievement to *action* and *results* is critical in reaching key milestones. In our work with frontline teachers and instructional designers in the two-year college and university environments, three barriers to moving forward with the activation of assessment of student academic achievement stand out.

The first barrier is the tendency for each organization, group, and even individual to recreate the model, using unique constructs and terminology. In our work with educators throughout the nation, we've observed that teachers and instructional designers frequently invest a great deal of time and a significant proportion of their instructional design dollars spelling out new frameworks and terminology—literally "rediscovering the wheel." Arguably, the process of defining a model provides a critical thinking learning experience and local acceptance of the model. However, the result has been a bit like the Tower of Babel, leaving the educational community with the perception that we cannot work with a common framework and language for instructional design and assessment.

When we began building the WIDS model, we believed that we would have a very difficult time aligning the instructional design frameworks of sixteen colleges. We found instead that the primary differences lay in our language for describing the elements of instructional design and the level of detail to which teachers and designers take the components. As we benchmarked "our" model with other learning organizations across the country and around the world, this finding was reinforced. We believe that educators who proceed with a "adopt, adapt, or revise" perspective are better able to focus the use of scarce instructional design resources on the design, deployment, assessment, and continuous improvement of specific learning experiences (degrees, programs, majors, courses, workshops, etc.) rather than continually reinvesting them in a never-ending cycle of reworking the model.

The second barrier is a disconnection between planning and practice. As most colleges move toward assessment of student learning, members at all levels of the college community engage in much activity, setting goals, publishing documents that describe and support the initiative, and establishing macro learning outcomes. Unfortunately, the plans sometimes have little impact on what happens on the frontlines of teaching and learning. Colleges that integrate the assessment process with the instructional design process are more successful in making assessment of student learning a way of life in the educational community; and making assessment of student learning a way of life is the only way to ensure that it truly can make a positive difference in the quality of teaching and learning.

The third barrier occurs when educators take the position that they need to build their own software tools in order to achieve their unique goals. It is easy to underestimate the investment needed to initiate and nurture a "home-grown" software tool. Each of the software tools presented in this case study cost millions of dollars and took several years to develop. They are the products of much research and input from thousands of practitioners. Educators who are willing to examine existing software tools and choose one that they can adopt or adapt to meet their needs will avoid the quagmire of developing tools that require the collaboration and the combined resources of many organizations. Though no one tool is right for all organizations, chances are good that most colleges will be able to find an existing tool that can help them do the job.

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Educating Seniors, Assessing Ourselves: A Senior Year Experience

Beth Rigel Daugherty, Dan Thompson, and Susan Thompson

Introduction

The Otterbein College Senate instituted the Senior Year Experience (SYE) requirement as a pilot program in January 1995, charged the ad hoc committee responsible for creating the requirement with implementing and testing it for four years (classes of 1999–2002), and called upon the curriculum committee and the senate to decide at the end of the experiment whether the SYE requirement should be "continued, transformed, or concluded." At that moment, a committee that had been focused on creating a curricular space for the integration of the major and the general education core became an assessment committee as well. This presentation will explain how a group of people with no formal training in assessment developed assessment tools, met the need for qualitative and quantitative data, and created an assessment model for continued improvement. More important, our presentation will show how the collecting of assessment data transformed us: how the frightening demand that we prove our worth at the end of four years became, instead, a sustaining process that taught us a great deal about our seniors, our program, and ourselves.

The Senior Year Experience Requirement at Otterbein College

Otterbein is a private, church-related, four-year coeducational college located in Westerville, Ohio, a suburb of Columbus. The college sponsors traditional and continuing education programs in liberal arts and professional education at the baccalaureate and master's levels. Its mission is to "educate the whole person in a context that fosters the development of humane values." Fifty-one percent of its students choose professional majors, putting Otterbein in the "comprehensive" category used by Carnegie. All students must take ten courses in the integrative studies program, a liberal arts core focused on the theme of human nature. The IS program spans the four years of the undergraduate degree and requires students to take courses in the social sciences, the arts, the natural sciences, religion and philosophy, including global thought, and literature and composition.

The Senior Year Experience requirement grew out of surveys of seniors and alumni conducted in the late 1980s that suggested the need for a culminating curricular segment at Otterbein. Many seniors stated they did not connect the major and the core curriculum, and very few felt they had an improved understanding of contemporary social issues. Alumni indicated they lacked practice in doing interdisciplinary work and requested opportunities for gaining such practice. After extensive experimentation with interdisciplinary, team-taught courses in 1992–1994, positive student and faculty response to those courses, and campus-wide discussions, the Senior Year Experience requirement was developed and then approved as a pilot program by the college senate in 1995. SYE was created to provide a place in the curriculum where students and faculty could strive to reach the broader institutional goals stated in the college's mission statement: its commitment to "the liberal arts as the broad base of all learning," its support of lifelong learning in which students "develop the ability to participate thoughtfully in discussion and decision making" and "develop the powers of synthesis," and its aim to create "an atmosphere which stimulates students to become aware of themselves and their responsibilities within a larger, multi-cultural society" and prepare "the whole person to develop responsible commitments to society."

The Senior Year Experience is designed to teach and strengthen the skills and practice of synthesis; to ensure structure, content, and credit for the work of connecting learning across disciplinary boundaries; to provide a focal point and closure for the four years of a liberal arts education; and to provide a bridge between academic learning and responsible citizenship. SYE courses and options were developed to expose students to significant contemporary social issues that challenge us as citizens; give tools for understanding and making ethical choices when faced with such issues; provide a curricular space in which to bring together the learning gained in majors and integrative studies courses; provide opportunities for working together on issues that require a wide range of disciplinary perspectives and expertise; and enable students to consider their roles as educated persons, professionals, and citizens. The SYE requirement also provides a way for the college to assess itself. Students can meet the SYE requirement through (1) team-taught five-credit-hour interdisciplinary SYE courses; (2) departmental options that meet the SYE criteria; and (3) SYE options tied to off-campus, immersion, internship, or individualized experiences.

Program goals for the SYE requirement had been developed at the outset and were stated in the original proposal to the campus community. The SYE committee charged with implementing, delivering, and assessing the SYE requirement has expected all SYE offerings to

- Analyze complex *contemporary* issues, for which the liberal arts graduate is expected, by society, to provide leadership
- Develop, refine, and practice the *skills of synthesis*, ensuring that students draw from multiple disciplinary bases and move beyond relativist assessments of diverse perspectives to responsible synthesizing of these perspectives
- Use *interdisciplinary* course structures and materials, emphasizing that the liberal arts graduate needs to be able to recognize the strengths and the limits of different disciplines
- Structure *active self-reflection*, including conscious attention to *ethics* and personal *values*
- Provide models and structures for students to *integrate learning*, bringing to bear knowledge gained in core courses *and* knowledge derived from major and elective courses
- Bring students into social and intellectual *interaction with the wider community beyond Otterbein's campus*

These program goals were communicated to faculty participating in summer workshops on SYE course development and on interdisciplinary and team teaching. All proposals to the SYE committee for courses, departmental options, or immersion options had to show how these program goals would be met.

Multiple Assessment Measures for SYE

Our development of assessment tools looks much more coherent in retrospect than it did while we were developing it. In practice, the process was recursive; we were constantly revising on the basis of new knowledge or previous assessment. The following summary does not reflect the numerous hours spent sitting around a table discussing student learning outcomes; the wording of questions and statements on the tools described below; and our uncertainty about whether this type of student learning could be measured, and if so, how. How were we to measure the learning of intellectual skills such as synthesis, for example? Our instincts told us we had a good idea, that we had created a good addition to our curriculum, that we were basically doing a good job in implementing and delivering it, and that students were learning what we wanted them to learn. But we couldn't take those instincts to the bank.

Earlier surveys had showed us that alumni generally did not see the value of integrative studies, the liberal arts core at the heart of Otterbein's education, until five to ten years after graduation. In fact, that realization had had a lot to do with the creation of SYE in the first place. Would SYE help alumni see the value of their liberal arts education sooner? That question underlay much of our work, but two other questions guided the creation of our assessment tools: (1) Does SYE make a difference? (2) Do students who fulfill the requirement reach SYE goals? The first question implied two sorts of measurement: (1) baseline data collected prior to SYE that could be compared to data collected during the years of the requirement and (2) data that would measure the impact of SYE. The second question implied a more specific kind of measurement and meant focusing on student learning. In addition, we had tried to create a curricular space for bringing together the major and integrative studies that would be experienced by students as different from both. Had we succeeded? For that and many other reasons, we needed to know what students and alumni thought of SYE. Later, we realized we needed to know what the faculty who were developing and delivering SYE thought as well.

Since our institution was already administering the Higher Education Research Institute freshman year survey to its freshmen, the SYE committee decided to administer the nationally normed College Student Survey to seniors beginning in 1996. We hoped the CSS, combined with the CIRP, would give us reliable baseline data for tracing the attitudinal change from freshmen to seniors both before and during the years of the SYE requirement. Because some committee members had taken part in a FIPSE-sponsored critical thinking project in the mid-1980s and had studied William Perry's process for creating his developmental schema, we decided that videotaped *senior exit interviews*, conducted both before and after the requirement began, might also be useful for collecting data from before and during SYE.

We used our college's *standard course evaluation form* to assess student reaction to SYE offerings, but we also developed a set of *additional questions* more directly related to SYE to assess students' perceptions of their own learning. Although the time frame of the pilot program did not give us many alumni to consult, we did an *alumni survey* of two classes. We collected *student comments* from the course evaluation forms, from reflective journal entries and papers, and from self-assessments conducted in some classes. We gathered additional student feedback in *student focus groups* held right before graduation and faculty feedback in *faculty focus groups*. Finally, at mid-point and near the end of the experiment, we sought the help of Otterbein's *assessment committee* and three *consultants*. We were gathering a great deal of data, and as educators we thought we knew what the data were telling us, but we needed help in (1) analyzing and interpreting the data accurately, (2) converting masses of qualitative data into quantitative data and putting all data into formats that others could read and understand, and (3) assessing our assessment efforts.

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Always guiding our assessment efforts were the six program goals for SYE offerings noted above. Everything from extra questions on the CSS to the senior exit interview prompt, from extra questions on the course evaluation form to the alumni survey, from the questions we asked students and faculty to the questions we asked our consultants grew out of our program goals. We had many other questions, of course, and the questions kept changing, as happens in all human enterprises. But we kept pulling ourselves back to our purpose and our goals. Somehow we knew, even as assessment novices, that those goals were our anchor, were what we had to measure, and were tied to what we wanted students to learn.

Using Assessment to Measure Impact

Does SYE make a difference? Did student learning after the requirement began differ from student learning before the requirement? The College Student Survey could not tell us. For one thing, because we could administer the CSS on a voluntary basis only, the percentage of students completing both it and the CIRP was extremely small. For another, CSS measures student attitudes about their college experience and about specific social and political issues rather than outcomes related to SYE goals. Dr. Karl Schilling, the external evaluator we consulted to assess our assessment tools, advised us to discontinue its use. He also suggested that our senior exit interviews were valuable, but that our home-grown coding methods were not giving us the data we needed. As a result, we consulted Dr. Sandra Pritz of the National Occupational Competency Testing Institute (NOCTI), who developed a rubric based on the goals of the SYE program. She and two NOCTI project staff members viewed and coded the tapes from 1997 and 1998 (pre-SYE years) and 1999 and 2002 (SYE years). Their analysis showed clear evidence that SYE makes a difference in students' abilities to synthesize, integrate the major and the general education core, and reflect on the whole of their education. SYE also increases students' recognition of the strengths and limits of different disciplines and increases their engagement beyond the campus.

Do students reach goals? The interviews, a direct measure of student learning, told us that over 85 percent of our seniors either moderately, clearly, or significantly met all the SYE goals during the SYE pilot program. The additional SYE questions on the course evaluation form, on which students reported their own perceptions, told us that the SYE offerings succeed in helping the majority of them make connections, confront contemporary social issues, and think about themselves as citizens. Results of the alumni survey of the classes of 2000 and 2001 correspond to the results of the externally evaluated senior exit interviews and the self-reported course evaluation data for the additional SYE questions: SYE expected students to confront contemporary social issues, helped them make connections, moved them to engage with the community beyond Otterbein, and helped them begin to think about themselves as citizens. A majority of students and alumni reported that SYE had helped them be more open to new ideas, provided the opportunity for interaction with a more diverse group of students, provided a different educational experience from other courses taken at Otterbein, and had added something positive to their education.

Using Assessment to Improve

The consistently positive response to SYE did not mean, of course, that the requirement was having an impact on every student or that negative feedback was nonexistent. Course evaluation data, specific item means for the SYE additional questions on course evaluations and on the alumni survey, student and faculty focus groups, and comments gathered from a variety of sources gave us information about concerns and told us that their nature was also consistent. In fact, the negative feedback reinforced the positive, giving us the same messages about what we needed to improve. Reading the data has meant responding with change; thus, assessment has shaped the program's evolution and its future direction.

- **Program.** In his evaluation of Otterbein's senior year, including SYE, Dr. John Gardner told us that the program's academic goals were solid, but that we needed to pay more attention to the transition seniors were experiencing. Faculty members told us that students did not seem to understand the purpose of SYE. As a result, the SYE committee clarified the nature of SYE—that it is more of a bridge than a capstone—and worked with the registrar, the career development center, student affairs, and development to create a *senior survival guide.* This guide, which is given to juniors prior to spring registration, includes sections on the nature of transitions, deadlines, SYE (with more student-friendly descriptions of the program, offerings, and choices), careers, and celebrations for seniors campus-wide. In addition, we added a session on the senior transition to the summer SYE workshop for faculty. We plan to continue to work with the rest of the college to draw attention to the senior year as an important transition that requires thoughtful curricular and co-curricular planning from all of us, and our next project is a Finances 101 booklet and/or workshop.

  Students noted difficulties with scheduling and expressed dissatisfaction with lack of choice in SYE offerings. They also were disappointed when offerings lacked currency or contemporary relevance. As a result, we have stepped up efforts to recruit faculty for SYE; have publicized the choices that are available more widely, including in the *senior survival guide;* and have tried to ensure that SYEs are offered in all our delivery systems throughout the academic year. We have also clarified SYE's focus on citizenship and emphasized the importance of contemporary topics with faculty during the summer workshops and during the course development process. We plan to survey students about topics they are interested in, investigate how to

bring students and faculty together to develop offerings around student-generated topics, and hold several advising sessions to improve faculty awareness of SYE choices and to gain more information about specific scheduling difficulties.

◊ **Learning.** Students and alumni told us they learned more when SYEs gave them the opportunity to work with students from other disciplines; included plenty of discussion, especially from their own and other disciplinary points of view; had time to reflect; and provided lots of active, real, hands-on experience. They also noted course management problems associated with team teaching. As a result, we have added a second summer workshop on teaching SYE that includes discussion and exercises related to team teaching, active pedagogy, and student learning. We plan to work more closely with Otterbein's new Center for Teaching and Learning to provide even more support for faculty members who risk doing interdisciplinary team teaching in a general education setting.

The assessment committee suggested that we should collect more direct evidence of student learning; Karl Schilling noted the opportunity SYE provides for external critique; and a student member of the SYE committee suggested devising a brief generic pre-SYE and post-SYE survey that would measure the progress made in SYE by both students and faculty. We plan to ask faculty members to collect copies of projects, papers, journals, and student self-assessments for assessment purposes; to investigate the possibility of using SYE portfolios; and to encourage faculty members to hold public presentations of group projects to which the campus and external evaluators are invited. And we plan to follow up on the student's suggestion.

◊ **Teaching.** Karl Schilling and faculty members told us that teaching SYE is a powerful faculty development tool; teaching in a team provides numerous opportunities for discussion, learning, and growth. But faculty members have also indicated that they need more support prior to, during, and after teaching in the program. As a result, we have added components on team teaching to the course development workshop and added a teaching SYE workshop to our summer program. We plan to make observation of offerings, formative discussions with SYE faculty, and faculty focus groups and surveys a regular part of the committee's duties. We also plan to ask SYE faculty members to write brief reflective essays about their SYE teaching a couple of months after they have done so; these essays will provide us with information about how to help future SYE faculty and will provide faculty members themselves with a rich resource.

◊ **Assessment.** Sandra Pritz's analysis and our observation told us that our interviewing of seniors needed to become more uniform. We plan to ask Dr. Pritz to hold a training session that covers not only our interview prompt and the interviewing process, but also coding tapes according to a rubric.

The assessment committee and our experience of working with the data suggested that we needed to restate our program and offering goals as expectations for student learning, revise our assessment tools to align with those changes, and communicate the new goals more widely. We have clarified SYE expectations for both students and faculty, will revise our assessment tools accordingly, and will ask faculty to include the list of these expectations on their syllabi. Students in all SYE offerings can expect to

- Analyze and engage with complex contemporary issues for which the liberal arts graduate is expected, by society, to provide leadership
- Practice the skills of synthesis by drawing from multiple disciplinary bases and by developing a "big picture" from diverse perspectives
- Use interdisciplinary materials and methods and begin to recognize the strengths and limits of their own and other disciplines
- Practice active self-reflection, giving conscious attention to ethics, personal values, and citizenship, including their roles and responsibilities as educated persons, professionals, and citizens
- Practice the integration of learning, bringing together what has been learned in core courses and in major and elective courses to confront a contemporary issue
- Reflect on liberal arts education, its purpose, and its uses

Our assessment efforts have also told us what assessment efforts we need to make in the future. We need to continue what we're doing, with some revision, and also add the following.

- Assessment of spring-term juniors to gain better input data (IEO assessment model)
- Regular alumni surveys, perhaps with a view toward a longitudinal study of SYE's impact
- A regular review process of all SYE offerings to ensure that SYE goals are being met, engaging pedagogy is being used, and documentation of student learning and achievement is occurring

- A mechanism for closing the assessment loop—how we can use SYE assessment data to more effectively assess the college, its curriculum, and its support for student learning, and then effect change

◇ **College.** Working with seniors and faculty, listening to seniors and alumni, and analyzing our assessment data have taught the SYE committee a great deal, not just about the SYE program, but also about the senior year in general. As a result, SYE has evolved into a program with a stronger emphasis on

- Using one's whole education in the practice of citizenship
- Reframing what one knows within a new context and in order to confront a complicated issue
- Using the disciplinary expertise of students in an interdisciplinary setting
- Having students use what they know and learn for something larger
- Having faculty become partners with students in the face of complex, real issues
- Learning how, not just what, through problem-solving, negotiation, doing, applying, interacting with the world beyond Otterbein
- Seeing the senior year as a bridge to becoming an educated person, professional, and citizen

SYE and its assessment have given us a clearer picture of seniors as they come in and leave SYE. Now that the college has this program as its endpoint for a baccalaureate degree, what can it tell us about seniors, about student learning, about Otterbein's curriculum, about the college? What should we be doing at the freshman, sophomore, and junior levels to better prepare students for SYE and its purpose? What new questions should we ask about preparing students for SYE, preparing them for life beyond the college, and preparing them for lifelong learning? What new questions should we ask about advising, about the balance of the major and the liberal arts core, and about the value of working with the major in contexts outside the major? What will we learn from public presentations, from external evaluators, and from portfolios? How can SYE help us close the assessment loop?

We have learned the value of assessment for SYE, and we have learned the value of having multiple and specific assessment tools. We have learned what a powerful assessment tool the senior exit interview is for assessing student learning and for assessing a program. Might the college use the senior exit interview to assess student learning on a wider scale and to assess itself? How might we revise course evaluation forms to include more tailored course evaluation questions that get at student learning? How might we enlarge the concept of self-assessment and portfolios to include the entire college career rather than one segment of it?

Lessons Learned

When we began the SYE pilot program, we suspected that simply asking seniors certain questions, both directly and indirectly through SYE, would cause them to reflect in a more metacognitive way on their entire education and thus frame their college achievements differently and see the point of their liberal arts study sooner. We now realize that in asking ourselves certain questions, both directly and indirectly through SYE, we are reflecting on the entire curriculum at Otterbein in a more holistic way and thus framing both SYE and an Otterbein education differently and seeing the point of seniors' struggles more clearly. We have discovered that (1) collecting assessment data for external reasons and really looking at what that data say leads to change and the collection of assessment data for internal reasons—for making further improvements; (2) having various kinds of data all tied to program goals provides the most persuasive arguments for keeping a program and the most reliable suggestions for strengthening a program; and (3) trying to measure where students are always shows us where we are as well. We cannot be sure where all these questions will lead at this point, but given our experience of assessing the SYE requirement, we expect the recursive process to continue and the ripple effect to widen.

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Active Learning: A Rubric Definition

Cy Leise

Introduction

Active learning is a widely discussed concept that needs better operationalization. A simple Internet search results in a huge number of hits—even allowing for extensive redundancy and overlap—that leave one with a multitude of definitions and practices that are difficult to integrate. Two conclusions seem difficult to avoid: (1) a useful definition of active learning must be multidimensional, and (2) the educational processes required to implement active learning must be conceptualized in terms of a teaching/learning system. The first point, the focus of this paper, will be addressed by describing two new rubrics developed for measuring the level of active learning from the perspectives of learner and instructor. The second point will be addressed more briefly by suggesting some program assessment steps designed to produce outcomes associated with active learning.

Resources for Rubric Content

Many authors (e.g., Browne & Keeley, 2001; Loacker, 2000; Angelo & Cross, 1993; Centra, 1993; Schön, 1987) address the topic of active learning either directly or in relation to topics like assessment and/or evaluation of student learning and of faculty teaching practices. A very large number of Internet sites (see the Additional Resources at the end of this paper) provide definitions, links, techniques, simulations, handouts, procedures, lesson plans, measures, and other material to help instructors implement active learning practices in their courses. Many thoughtful insights and procedures are available in articles in association publications and proceedings (e.g., Chambers & Parks, 2002; Higher Learning Commission, 2002; Jeffers, 2002). The challenge involved in adapting others' practices into one's own is a substantial barrier to rapid change, but clearly the rate of engagement is rapidly increasing if the number and quality of resources is a guide.

By reading and noting how various authors labeled, used, or designed active learning practices, an extensive list of features and characteristics was gathered as a first step in conceptualizing what specific elements seemed significant for students and faculty at Bellevue University. This resource list plus extensive personal experience with systematically implementing active learning in introduction to psychology classes (Leise, 2002) provided a foundation for proceeding with a definition of active learning and the creation of the present rubrics.

Rationale for Active Learning Rubrics

A clear definition is essential to creating a practical frame of reference for identification of learning performances considered "active" and to guiding efforts to improve. A definition also must support effective measurement of active learning outcomes. At Bellevue University we must meet this challenge because we have committed to implementation of active learning as central to our mission. Therefore, it is one of our institutional areas of focus approved by the Higher Learning Commission for our AQIP accreditation model.

After I wrote a definition of active learning and began conceptualizing how to build an active learning rubric to address the measurement problem, it became apparent that there are significant differences of perspective between learners and instructors. Therefore I developed the two parallel rubrics discussed here. The first is a scale for rating professional progress of instructors in actually creating active learning environments. The second is a scale for rating personal growth of students/learners in ability to assess their own learning. Focus on instructor strategies is equal in importance to learner outcomes because active learning will occur only to the extent it is modeled, supported, and facilitated by instructors. Furthermore, the likelihood of student buy-in increases if instructors across disciplines consistently implement active learning strategies. These holistic rubrics can be used for any instructional context or discipline for general program assessment. It is expected that more specific measures will be developed within courses and programs as data become available to guide more detailed interventions.

Holistic Rubric Design Methodology

Bargainnier (2003) provides an overview of types and purposes of rubrics, which include task-specific rubrics (e.g., to assess athletic performances); generic rubrics (e.g., to assess across-context oral communication performances); and holistic rubrics, which are

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useful for complex processes. Active learning fits the holistic rubric model because it is composed of many component processes, each of which could be separately rated or scored. Bargainnier lists the characteristics of useful rubrics: They must have clear performance criteria and rich descriptive language, focus on positive attainments, distinguish between performance and effort, and be reliable and valid. Apple and Krumsieg's (2001) "Methodology for Creating Performance Measures," presented in Pacific Crest's *Curriculum Design Handbook*, was the model used to develop the holistic active learning rubrics described here.

Development of the Instructor Rubric

Steps in the Apple and Krumsieg (2001) methodology resulted in the following "set-up" information for the instructor rubric. (A copy of the rubrics is available from the author by e-mail: cleise@bellevue.edu.)

☐ **Definition of Active Learning (Instructor Perspective)**

The following definition, and the one for the student active learning perspective (below), resulted from integration of commonalities across resources in the reference list. The wording intentionally presents a "profile" of effective instructors as a way to define active learning in a way that can be implemented, assessed, and measured.

> Instructors who use active learning strategies have positive attitudes about students' competencies, emphasize learning of effective processes with potential to generalize across areas of knowledge, design learning activities that can move learners step by step to higher-order levels of knowledge, and incorporate assessment into all aspects of the learning environment. Further, they strive to involve students by gaining their commitment to learn at a challenging level, by maintaining a warm social environment, by providing realistic tools and resources, and by helping them learn to transform any source of feedback into useful information for assessing performance.

☐ **Ten Key Factors That Control Quality in Use of Active Learning Methods by Instructors**

The definition of active learning from the instructor perspective guided a brainstorming process that was summarized as ten factors (variables) judged to account for most of the differences among instructors in their implementation.

1. Design courses and classroom activities around learning objectives and criteria of success.
2. Use open or transparent evaluation systems focused on level of learning expected.
3. Facilitate improved attitudes toward learning by helping students learn to use many sources of assessment feedback.
4. Facilitate learning by means of interventions that encourage student ownership of the learning process.
5. Integrate assessment of learning processes into courses to help students improve their outcomes.
6. Adjust instructional methods and strategies to learning style and personality differences.
7. Provide a variety of tools to support learners' success.
8. Support learning through methodologies and models that map main elements of complex assignments.
9. Assume that learning at higher levels requires solid performance of lower-level skills.
10. Assume that learning should transfer and generalize to significant life contexts.

☐ **Five Integrated Factors for the Instructor Rubric**

The ten factors were further integrated by reducing them to five factors by creating statements based on pairs of closely related items. (These are ranked and paired in the list above; items 1 and 2 are the input for factor "a" below, etc.) This reduction made it possible for the final measure to capture the main variables that make a difference in active learning, while also keeping the amount of detail manageable. For the instructor rubric, the five factor statements that resulted were the following. ("Shorthand" phrases in bold print provide a quick way to reference the factors.)

Factor a: **Curriculum design.** Curriculum outcomes are judged on the basis of standards that are related to reliably observable behavior and/or to measures.

Factor b: **Learning facilitation.** Facilitation results in increased self-efficacy (accurate confidence) of learners because of their openness to any source of performance feedback.

Factor c: **Leveraging of learning styles.** Integration of assessment of learning processes results in higher quality, and enriched outcomes through "leveraging" variations in individual learner goals, styles, and personality.

Factor d: **Variation of resources.** Resources, tools, and models for learners are selected to support their success with complex challenges.

Factor e: **Learning generalization.** Generalization of learning is achieved by focus on building higher-level skills needed in life contexts.

☐ **Labels for Five Levels of Quality of Instructor Facilitation of Active Learning**

Having established the five factors (variables) that "anchor" instructor performance related to facilitation of active learning, five levels of competency were conceptualized and labeled. Because performance in this complex area involves long-term growth, the top levels describe depth and breadth of expertise that is unusual. Some instructors find it professionally beneficial to put more intense energy into discipline-based research; others may find teaching/learning scholarship and research more suitable for their career progress. The instructor rubric is designed to indicate that the middle level, level 3, is considered strong performance—a level to be expected in a program assessment system. The intent of the levels is to clearly identify performance that is below expectations as well as performance levels to be aspired to.

5. **Transformational** Uses learning challenges and facilitation methods that result in life change in learners.
4. **Enriching** Moves learners to explore knowledge applications beyond expectations.
3. **Engaging** Consistently produces active learners who can self-assess performance against standards.
2. **Conventional** Manages learning by clearly defining outcomes; discounts the value of facilitation of learning processes.
1. **Risk Averse** Avoids change; discounts the value of assessment of teaching strategies or of supporting learning processes.

☐ **Final Format of the Instructor Rubric**

Having established the five factors and the five levels, items were written to reflect how each factor is most likely to be demonstrated at each level. Thus factor a at level 1 (Risk Averse) indicates instructor behavior and attitudes related to restriction of learning caused by setting objectives related only to content in a specific course text. Factor a at level 3 (Engaging) indicates much stronger curriculum design including clear standards of performance.

The goal for the set of items across factors a through e at each of the five levels is to create a *gestalt*, or coherence, in the total picture at each level. Thus at level 3, all items should be consistent with each other in the sense that it is very likely that someone who creates curricula in the way described will also support accurate self-assessment skills in learners.

Creation of the Student Rubric

The student rubric was developed to be parallel to the instructor rubric. The student behaviors described at each level are assumed to be related to, if not caused by, instructor active learning facilitation at the analogous level on the instructor rubric.

☐ **Definition of Active Learning (Student Perspective)**

Students committed to active learning have positive attitudes about their own competencies and accept the larger goal of learning to learn so they can become highly effective at using processes with potential to generalize to work, life, and citizenship. They appreciate well-designed learning opportunities that help them move step-by-step to higher-order levels of knowledge. They have learned the affective skills involved in changing their attitudes about assessment, with the result that they can transform even negative, evaluative feedback into useful performance feedback. They strive to set their own learning standards above those required to ensure that they continue to challenge themselves. They maintain a positive social environment with peers and instructors by continually improving their communication and teamwork skills. They learn to continually review the tools and resources provided by the instructor and seek out additional ones that have potential to maximize performance.

☐ **Ten Key Factors That Control Variability in Use of Active Learning by Students**

1. Commit to well-designed curricula that support learning steps and include clearly defined outcomes and standards.
2. Question the connections between the learning processes and the outcomes to assure themselves that the evaluation system is transparent.
3. Expand openness to assessment by overcoming performance anxiety and frustration.
4. Achieve a sense of ownership of the learning process through learning from instructor facilitation.

5. Respond to the full implications of instructor and peer assessment feedback by continuing to use insights across all learning contexts.
6. Adjust strategies for achieving performance standards by taking into account individual learning style and personality differences.
7. Use all relevant resources and tools, including those previously acquired, to support success with learning processes related to outcomes.
8. Break down complex tasks into steps by using methodologies and models that guide or map how the main elements should be addressed.
9. Assume that learning at higher levels requires solid performance of lower-level skills
10. Assume that learning should transfer and generalize to significant life contexts.

☐ **Five Integrated Factors for the Student Rubric**

As was done with the instructor rubric, ten factors resulting from a brainstorming process for the student perspective were "integrated" by creating five factor statements based on pairs of closely related items. (These are ranked and paired in the list above; items 1 and 2 are the input for factor "a" below, etc.) This reduction made it possible for the final measure to capture the main variables that make a difference in active learning for students, while also keeping the amount of detail manageable. The five factor statements that resulted were the following. (The shorthand phrases in bold print provide a quick way to reference the factors.)

Factor a: **Commitment to curriculum.** Commit to well-designed, challenging curricula judged on the basis of clear standards that are related to essential learning processes.

Factor b: **Learning to learn.** Achieve self-confident ownership of learning by effectively using assessment to learn how to learn.

Factor c: **Leveraging of learning style.** Develop learning attitudes and strategies that enhance ability to overcome blocks to learning and that make strengths of individual learning style and personality traits.

Factor d: **Varied use of resources**. Apply information processing skills to select resources, tools, and models that are most relevant to addressing complex challenges.

Factor e: **Learning generalization.** Achieve generalization of learning by building higher-level skills needed in life contexts.

☐ **Labels for the Five Levels of Quality of Student Engagement in Active Learning**

5. **Transformed Learner** Sets personal challenges that result in significant life change and growth.
4. **Enriched Learner** Actively explores how to use knowledge for applications of personal interest; performs beyond expectations.
3. **Engaged Learner** Active learner who can self-assess performance against standards.
2. **Conventional Learner** Manages learning by focusing on outcomes; limited in awareness of personal potential.
1. **Risk-Averse Learner** Grade-oriented; concerned about meeting requirements efficiently.

Program Assessment Considerations

The following steps, based on experience at Bellevue University, illustrate one approach to incorporating active learning into institutional program assessment.

1. Provide professional growth experiences to introduce active learning principles and the rubrics.
2. Request reflective reports by individual faculty members on the state of active learning strategies in one of their courses.
3. Hold a faculty interactive workshop to assess progress and plans for all program assessment projects.
4. Request each faculty member to assess active learning in a few student cases to identify variations.
5. Present program data for percentage of courses that meet the level 3 standard in the instructor rubric.

6. Present program data for percentage of students who perform at level 3 on the student rubric.
7. Continue annual data collection, workshops, and reports to increase quality and quantity of implementation.

Summary and Conclusions

Active learning assessment will not improve unless clear definition and measurement foundations are set in operational terms. Information resources and a rationale are offered for two multi-dimensional rubrics—instructor and student perspectives. Detailed information is presented for steps in the design methodology. The recommended level of performance is level 3 of five levels on each rubric. Levels 1 and 2 identify performance that is below expectations; levels 4 and 5 represent performance quality that will require longer periods of time as the result of personal and professional growth. Future challenges are suggested in the implementation sequence planned at Bellevue University. The most significant function of the described rubrics is to create a definite operational starting point that is flexible across programs and that is an "open" guide for creative options. As with any tool, successful use will depend upon commitment to continuous improvement on the basis of empirical information and reflection on teaching/learning processes.

References

Angelo, T. A., and K. P. Cross. 1993. *Classroom assessment techniques: A handbook for college teachers*, 2d ed. San Francisco: Jossey-Bass.

Apple, D., and K. Krumsieg. 2001. *Curriculum design handbook*. Lisle, IL: Pacific Crest. Available at ‹http://www.pcrest.com›.

Bargainnier, S. 2003. Fundamentals of rubrics. In Pacific Crest, *Faculty guidebook: A comprehensive tool for improving faculty performance*. Lisle, IL: Pacific Crest. Available at ‹http://www.pcrest.com›.

Browne, M. N., and S. Keeley. 2001. *Striving for excellence in college: Tips for active learning*, 2d ed. Upper Saddle River, NJ: Prentice-Hall.

Centra, J. A. 1993. *Reflective faculty evaluation: Enhancing teaching and determining faculty effectiveness*. San Francisco: Jossey-Bass.

Chambers, T., and S. Parks. 2002. Helping students find their place and purpose. *About campus: Enriching the student learning experience*. American College Personnel Association November-December 7: 20–24.

Higher Learning Commission (HLC). 2002. *A Collection of papers on self-study and institutional improvement*. Chicago: HLCr.

Jeffers, R. 2002. Making student self-assessment work. *Washington Center News* Fall: 18–20.

Leise, C. 2002. *Process education activities for introduction to psychology*. Lisle, IL: Pacific Crest.

Loaker, G., Ed. 2000. *Self-assessment at Alverno College*. Milwaukee, WI: Alverno College Institute.

Schön, D. A. 1987. *Educating the reflective practitioner*. San Francisco: Jossey-Bass.

Additional Resources

The following sites, plus many more, are easily accessed by searching with the term "active learning."

Campbell, K. 2003. The Web: Design for active learning. Provides an overview of a constructivist approach to active learning; makes clear connections to educational theories.

Dodge, G. 2003. Active learning on the Web. Internet site on using the Web for student research.

Felder, R. 2003. Active learning and cooperative learning. Emphasizes the opportunities for active learning through teams.

Fink, L. D. 2003. Active learning. Presents a model of active learning involving four components: two kinds of experience—(observing and doing), and two kinds of dialogue—(with self and with others).

Fleming, N. D., and C. C. Bonwell. 2003. VARK: A guide to learning styles.

Harvard Project Zero. 2003. ALPS: Active learning practices for schools.

National Teaching and Learning Forum. 2003. Provides active learning definitions and describes practices.

Sage Journals Online. 2003. Provides information for *Active Learning in Higher Education*, an electronic journal available by subscription.

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English 101 Writing Assessment That Keeps Both the "Quants" and the "Quals" Happy

Lynn Sykes and Helen Szymanski

Introduction

The English department at College of DuPage, after several years of work, instituted mandatory placement for students enrolling in English composition courses. The program became operational in fall 2001 as a project of AQIP. In keeping with AQIP goals, we needed to measure the success of the students who had been placed in developmental courses as they left their developmental course(s) and also as they completed their first course for credit—English 101. We had to compare the developmental students leaving English 101 to their peers who had not been required to take developmental English.

With more than five thousand students enrolled in English 101 each year, this promised to be a major project involving the entire English faculty. It seemed like a good idea to expand the purposes of the assessment to include English 101 program review. To do this, we designed an assessment that could serve the purposes of comparing developmental students with students who had not been placed in developmental courses while at the same time giving us qualitative information about 101 student writing that we could use to evaluate our program with the goal of improvement.

Baseline Data and Assessment Design

To evaluate to what extent mandatory placement is effective in improving student writing, we needed to measure student writing before mandatory placement was instituted. Fortuitously, the English department had collected data on student writing in spring and fall 1997 and winter 1998, several years before mandatory placement was instituted. There was, however, mandatory testing. Students scoring below the cutoff point were advised, but not required, to take a developmental writing class. Some students followed this advice; many did not. At that time students at the end of English 101 had written essays of approximately two typed pages in response to a prompt based upon an article. After consulting with Harlan Schweer and Prudy Widlak of the research and planning office, who were available for advice on constructing an accurate and effective assessment instrument, we decided to use these essays to establish a baseline. In addition, we consulted them about evaluating the essays by holistically grouping them in quartiles, a plan they accepted. Presentation of the idea to the English faculty raised questions and comments resulting in explanatory documents (Appendix) that allayed many of the initial misgivings and answered some of the questions.

Data Collection

Through consultation with the office of research and planning and a series of meetings with faculty, we determined the precise form of the essays for our post-mandatory placement assessment, which needed to be similar, but not identical, to the baseline assessment. In the fall quarter of 2002, instructors were asked to turn in the completed student assessment essays during the week of December 10–17. We received essays from approximately 92 percent of the English 101 classes, which pleased us.

Analyzing Baseline Data

The day before fall 2002 quarter classes began, the full-time faculty met to analyze the baseline data collected in 1997–1998. Each faculty member was given a twenty essays and was instructed to read the essays holistically and rank them in four equal-sized groups. Previously, the set of essays had been copied onto three different colors of paper so we could readily recognize duplicate copies. The sets were shuffled systematically so that four different readers read individual essays and each read a different combination of essays. We encouraged the faculty to finish reading in less than an hour and most did so. During lunch, the assessment team and other volunteers worked to sort the essays into quartiles. If three or four raters judged an essay as belonging in a particular quartile, it was included in that quartile for the quartile descriptions. The other essays were not used for quartile descriptions.

As might be expected, there was more agreement on essays in the highest and lowest quartiles (nineteen and eighteen, respectively) than there was on essays for the two middle quartiles (nine for the second quartile and seven for the third quartile). Raters reported that they had more difficulty determining where the middle essays should be placed. Out of two hundred essays read, three or four raters agreed on the placement of fifty-three essays. This should not be taken to mean that the raters had widely different standards. Rather, this distillation is part of the design of the assessment. By shuffling the essays for each reader, we ensured that each essay would be read in a different context. Since the readers were instructed to have equal groups, essays would be ranked differently depending on the other essays in the set. Thus, essays that consistently ranked in the same quartile can be considered to be representative of that quartile, rather than borderline cases.

In the afternoon, the faculty reassembled. Each table analyzed the characteristics of the essays belonging in one quartile and then compared them to essays in the adjacent quartile(s). Since there were four quartiles and eight tables, two tables worked on each quartile, at first separately, then together. Most tables were finished with their descriptions in an hour and a half. Later, we typed the quartile descriptions, combining and organizing them. These quartile descriptions represent the qualitative data. We now have a description of the writing characteristics of English 101 students at the end of their course. These data are useful for evaluating the first composition course, seeing overall strengths and weaknesses, and making decisions about areas on which to focus.

We simultaneously collected quantitative data on students who had been recommended for remediation. By identifying those students, we were able to see in which quartile they placed. Of the fifty-three essays chosen for the final quartiles, eight were written by students who had been directed to a developmental course. Five of those were placed in the lowest quartile. The writer of one of those five essays had taken a developmental writing course, as advised. The others did not take a developmental writing course. Two other students whose essays ranked in the lowest quartile had not taken the placement test.

Table 1

Quartile Distribution of Students Advised to Take Remedial Courses

Quartile	1 (Top)	2	3	4 (Bottom)
Total	19	9	7	18
Advised to remediate	2	1	0	5
Remediated	1	1	0	1
No placement test	0	0	0	2

Raters ranked one essay from a student who had been recommended to take a developmental course in the second quartile. That student had taken developmental reading and writing, as advised. Two of the essays were placed in the top quartile. The writer of one had taken developmental writing. The other student did not take any developmental courses. In addition, her reading score was quite low, 017, mysterious, or, should I say, suspicious?

Initially, we did not intend to collect quantitative data for this set of essays, since mandatory placement had not been instituted. We do plan to collect such data when we evaluate the post-mandatory-placement data we are collecting this year. At that time, we will need a larger sample of essays from developmental students. We can get that by assigning an average grade to each essay by a former developmental student that we evaluate. Then, even if the essay is not used for the qualitative quartile descriptions, it will be scored. For example, if it is ranked in the third quartile by two raters and the fourth by the other two, it will be scored as 3.5. Then we will have a quantitative assessment of the developmental students as they complete 101.

Implementing Assessment Data

We used our in-service day to begin the process of implementing what we learned from our baseline assessment. Full-time English faculty met off campus to discuss the quartile descriptions and what they indicated we should work on over the coming year. The faculty arrived at the following themes:

- Thinking made visible: critical and creative thinking
- Content and design: creation and organization beyond formulas
- Self-awareness, self-evaluation, and style: seeing oneself as potentially able to negotiate and alter the world

These themes will form the basis of in-house conferences or workshops at which faculty can learn from others and share ideas with one another. They submitted ideas for a teaching anthology to be distributed among the faculty and to be used as a resource for conference planners.

We established dates for a winter conference and a spring conference, and we plan to have one in the fall as well. These conferences will occupy an afternoon and be open to full-time and part-time English faculty. For the winter conference, we engaged a speaker from our philosophy department to make a presentation on critical thinking, and several faculty members, selected by reviewing the teaching anthology for pertinent themes, agreed to prepare poster presentations of their ideas for encouraging critical and creative thinking in their own classes.

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Appendix

Holistic Quartile Grouping

How is holistic quartile grouping done?

Readers each receive a bundle of about twenty or thirty essays. They read each essay holistically, judging its overall quality as a response to the essay prompt. After reading an essay, they place the essay in one of four personal groups, ranging from the best essays to the worst. As readers make their way through their bundle of essays, they adjust the growing groups so they end up with four equal groups.

How long will the reading take?

It usually takes thirty to forty-five minutes to holistically read and sort twenty-five or thirty essays, but we will allow an hour.

Equal groups? Suppose the essays do not divide equally?

It is likely that most bundles of essays will not divide equally. Readers need to remind themselves that they are not assigning grades to the essays, but simply saying, "These six (or five, or seven) essays were the best (second ranking, third ranking, or worst) in my bundle." When all the readers assign essays to one of four equal groups, we eliminate one common variable—readers judging essays more or less stringently—and thus make our evaluation more uniform.

But what if my bundle is particularly bad? Then my "best" group will actually be only "best of the worst."

True. First, we need to remember that we are not grading individual students. If you have a "best of the worst" group, someone else will likely have a "worst of the best" group, so the numbers will balance out. Second, the same essays you are reading are simultaneously being read by other people in the context of different bundles. After all the groups are combined into a quartile, if the majority of readers do not agree on an essay's placement, it will be regarded as ambiguous and will not be considered in the quartile description.

What happens to the groups when the readers are finished?

The groups will be consolidated into super groups—quartiles. The assessment team will sort through the essays in the quartiles. Only those essays that show up consistently in the quartile will be retained.

Explanation of Quartile Description

How will we go about describing the quartiles?

After the essays have been grouped into quartiles and the ambiguous essays have been removed, the faculty will divide into groups to develop a description of the essays in a particular quartile. To do this, they will read over the essays to find commonalties among them. In addition to describing what the essays in their quartile have in common, they will give examples of each trait that they notice.

Won't the essays in any one quartile represent a range of writing skills?

Probably they will. The description needs to account for this range and give examples of the variety that shows up in that quartile.

That sounds very open-ended.

It is, but one way the description will be limited is through contrast with the adjacent quartile. Each group will need to look over the essays in an adjacent quartile and describe the ways the essays in the top quartile, for instance, differ from those in the second quartile. Another limiting factor will be the categories we traditionally use to describe writing (controlling idea, evidence, organization, style, mechanics, and so on).

What can we learn from this description?

The description will give us particulars about our students' writing that cannot be found in a numerical score (quantitative analysis). With information about essay organization--for instance, including examples of organizational strategies (or the lack thereof) that typify each quartile—we will be able to identify those areas that fail to meet our expectations. Armed with this information, we can address our composition program, from active course files to staff development, more effectively.

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Chapter 4: General Education: Assessing Outcomes, Reforming Programs

The Higher Learning Commission
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Creating and Implementing a More Focused and Effective General Education Program

John C. Catau, William H. Cheek, and James P. Baker

Background

Southwest Missouri State University (SMSU) is a comprehensive, metropolitan university with an enrollment of more than 20,000. Prior to the implementation of its new general education program in fall 1997, the SMSU program was an unwieldy and poorly focused conglomeration of more than 350 classes. Because the aims and goals of this program were so vague and poorly defined, the menu of available classes included numerous courses designed more to introduce potential majors to a specific discipline than to accomplish a specific set of general education goals. In some instances, virtually all courses in an area (e.g., philosophy, literature, religious studies) were among the many choices available to students. With no permanent general education committee, oversight of the program was a responsibility of the entire faculty senate. Efforts to reform the program inevitably led to turf wars that resulted in many more additions than deletions.

The results of several unsuccessful attempts at comprehensive general education reform were obvious to North Central Association accreditation site teams. The 1985 site team report, for instance, included the following concern and suggestion: "The general education requirements do not match the institution's self image. The frequent revisions have left the university with reiterations of the 'cafeteria' system without achieving general education. The team suggests a major effort before the next decennial review to develop a coherent component of general education appropriate to a university committed to excellence in undergraduate education."

Reform Efforts

The faculty senate responded to the 1985 site team report by establishing a committee charged with reviewing and making recommendations for change in the university's general education requirements. Although the committee proposed a reformulation of the general education requirements in 1987, the senate was once again unable to reach a consensus, and the reform effort failed.

The next attempt to generate comprehensive general education reform began in 1993 when, shortly after his arrival on campus, President John Keiser indicated his strong support for change by appointing a select general education reform committee. Composed of highly respected members of the university faculty, this committee was charged "to assess the current program of general education and to develop a new program that will prepare students for their academic careers as well as for their tasks as citizens in the 21st Century." The new program was to be "coherent, connected to the overall mission of the university, capable of continuing and lively development, and competently managed."

The committee began work with the understanding that, in light of its charge as well as the 1985 site team report, cosmetic changes to the existing general education program would not suffice. This perspective became even more certain when the university's efforts to redefine its mission culminated in a new statewide mission in public affairs. The goal of this new mission, which was signed into law by Governor Mel Carnahan in June 1995, is "to produce citizens of enhanced character, more sensitive to the needs of community, more competent and committed in their ability to contribute to society, and more civil in their habits of thought, speech and action." As a university-wide concern, the public affairs theme is to be "housed and implemented in all units and departments." From an academic perspective, the public affairs mission means that "in addition to mastering one or more disciplines enabling problem solving in a variety of occupational settings, the student is understood as also having a life-long career as a citizen, for which discrete competencies and moral commitments are necessary." General education linkages to this new mission became an element of concern for the reform committee.

After nearly two years of intensive work including several open forums to encourage faculty input, the general education reform committee offered its new vision for general education to the 1994–1995 faculty senate for consideration and action. Consistent with

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the new public affairs mission, the overriding aim of the new program "is to develop people capable of making thoughtful choices that lead to creative and productive lives and to responsible participation in society." In a marked departure from the earlier general education program, the new program included a precise and comprehensive inventory of goals for learning in general education. It declared that "general education is that portion of the curriculum in which the university directly addresses the knowledge, skills, habits, and dispositions of educated persons...(It) provides for learning that educated persons will use throughout their lives in their many roles and communities." The specific goals of the program were divided into two subcategories: (1) those pertaining to intellectual abilities and dispositions and (2) those pertaining to knowledge and understanding.

With the aims and goals of the new program in place, the faculty senate debated and approved a framework for the new general education curriculum. Instead of identifying the specific classes that would comprise the program, the senate merely identified the overall structure of the program. It agreed, for instance, that the basic required courses portion of the new program would include classes designed to help the students develop and/or fine-tune their skills in computer literacy, public speaking, writing, mathematics, and health and well-being. The senate also agreed with the reform committee's recommendation that all new students be required to complete an introduction to university life class during their first semester on campus. The purpose of this latter class would be twofold: to improve student success (retention) while also introducing all students to the public affairs mission.

In recognition of the fact that "developing educated people requires intensive study in many areas of inquiry as well as interdisciplinary explorations," the senate agreed that a second component of the new curriculum would require each student to complete classes in three areas of inquiry. Because a "study of the natural world provides an understanding of important principles and methodologies for making choices," the first of these areas would focus on developing an understanding of the natural world. The culture and society area of inquiry recognizes that "informed choices require knowledge of what people have done and imagined, currently as well as historically. [And] choices are also tempered by knowledge of the social and cultural settings in which they are made or were made in the past." Classes from both a humanities and a social sciences perspective would be required in this area. The final area of inquiry, self-understanding, is based on the recognition that "to make informed choices, one must understand the natural and social context in which one lives and must heed the ancient injunction to 'know thyself.'" In this case, three perspectives would be required: social/behavioral, humanities, and creativity and vision.

The final component of the general education program was designed to offer a direct link to the university's public affairs mission. It would be made up of two American studies classes (a survey of American history and "American Democracy and Citizenship") as well as an upper-division capstone class entitled, "Public Affairs Issues for the 21st Century." The latter class, which should not be taken until a student has completed a minimum of sixty credit hours, is intended to integrate experiences generated by the other parts of the general education program while focusing on public issues and choices of broad importance.

In another significant development, the faculty senate also created a new permanent committee, the committee on general education and intercollegiate programs (CGEIP), to oversee and evaluate the general education program as specified by the *Constitution and Bylaws of the Faculty*. One of the first tasks this committee faced was the selection of all the classes that would comprise the new general education curriculum. None of the classes in the old program was automatically accepted into the new program. Instead, during the 1995–1996 academic year, departments were asked to submit proposals for classes for each of the general education categories. As a part of these proposals, the departments were instructed to show how the suggested class would address the aims and goals of the program. Each proposal was also required to include an assessment plan designed to enable the faculty teaching the class to evaluate its effectiveness as a general education class. Proposals receiving the approval of CGEIP were forwarded to the faculty senate for its approval. Successful proposals were then sent to the vice president for academic affairs and the university president for final approval. In the end, fewer than a hundred classes were approved for inclusion in the new general education program that was implemented in fall 1997.

While the structure of the new general education program was under debate in the faculty senate, and before the specific courses comprising the program were developed by departments and approved through the curricular process, the university experienced another NCA site visit. Not surprisingly, the 1995 site team identified the university's general education program as one of six concerns in its final report. Specifically, the team members noted that "while recent planning efforts in general education are encouraging, the same general education requirements are in place which were cited as a concern in 1985."

Implementation and Oversight

In recognition of the fact that one of the weaknesses of the preceding general education program was a lack of continuity and administrative oversight, the vice president of academic affairs created a new position, the associate dean of the university college for general education, during summer 1995. This meant that the person selected for this position, Dr. John Catau, who is also an *ex officio* member of CGEIP, was closely involved in the evaluation of all the general education course proposals. He was also in place when the new program was actually implemented in fall 1997.

Although curricular control of the general education program remains the prerogative of CGEIP, Dr. Catau oversees, coordinates, and administers all other facets of the general education program. Because nearly all of the general education classes are taught by the faculty in the departments that developed them, Dr. Catau works closely with those departments. The upper-division capstone class is a significant exception. "Public Affairs Issues for the 21st Century" is a variable topics class designed to be writing- and discussion-intensive as well as multidisciplinary in its perspectives. Individual sections of the class must be developed by faculty from at least two different departments. Once a topic has been fully approved, it may be taught by any interested and qualified faculty members. Some sections are team-taught; most are not. Since these classes are not "owned" by individual departments, the associate dean is responsible for their oversight.

As the university's articulation officer, the associate dean works closely with other colleges and universities to ensure that the transfer process to SMSU is as smooth as possible. He also serves as the primary appeal officer for those students with general education-related issues. The most common category of appeals is those made by students who believe their transfer credits have been incorrectly evaluated. Direct course equivalencies are created by department heads. In those instances when courses are not considered the equivalent of a specific SMSU class, however, the associate dean may assign a general education equivalency when it appears that the class meets the "spirit" of a specific general education requirement.

In addition to its role in approving changes in the general education curriculum, CGEIP is also responsible for overseeing the quality of the program. According to faculty senate action, "The CGEIP also will periodically review all general education courses to see that they attempt to achieve the Goals of Learning listed in Part One: Intellectual Abilities and Dispositions of the General Education document. Courses in the Areas of Inquiry portions of the General Education program will be reviewed to see that they also attempt to achieve the appropriate Goals for Learning listed in Part Two: Knowledge and Understanding....Each general education course and each section of the Capstone course will be reviewed at least once every three years to determine if sufficient interest and enrollment exist to continue the course or Capstone section in the General Education Program."

With this responsibility in mind, the CGEIP has divided the general education program into three subcategories. Every year all of the classes within one of these subcategories are up for evaluation and review. After several false starts and considerable hesitancy, the CGEIP has agreed that as a part of this process, departments must submit an assessment portfolio consisting of

- A written statement by the department head, program director, or appropriate designate that summarizes the status of the class
- Copies of the course policy statements and syllabi for every section of the class taught in the most recent semester
- A table that shows how the goals of the course under review are linked to the specific goals of the SMSU general education program
- A copy of the assessment plan in effect at the time of the review (The CGEIP's interest in this element is limited to whether the department has an effective assessment plan in operation. The results of the assessment plan are not required in the portfolio.)
- Enrollment data by semester for the course

Based upon its review of these materials, the CGEIP can recommend that a class be allowed to continue in the program without change, be allowed to continue in the program with change(s) that must be made before the next review, or be removed from the program.

In addition to the evaluation requirements of the CGEIP, the Center for Assessment and Instructional Support also contributes to the assessment of both individual courses and the overall general education program. The director of the center, Martha Kirker, assists the departmental faculty in developing their assessment plans. She is also available to help the faculty analyze, interpret, and use the assessment results to improve the effectiveness of their classes. Furthermore, Dr. Kirker administers and reports the results of a required general education exit exam.

Conclusion

After years of numerous unsuccessful attempts to reform its general education program, the faculty of SMSU responded to concerns expressed by NCA site teams and a clear commitment from a new university president with yet another attempt at comprehensive reform. A select committee of campus leaders began the task of designing a new general education program with the realization that, due to the size and complexity of the university, it would be impossible to completely avoid a distributional approach. With a freshman class of more than two thousand students each year, small and nontraditional classes would be unrealistic. Despite these circumstances, the committee crafted a new program that was more focused, with many fewer course options, a direct link to the university's new mission in public affairs, and a much improved oversight mechanism. None of the classes in the old program was

given a free pass into the new program. To ensure that all the courses in the program address a specific set of general education goals, regular evaluations are conducted by a standing committee of the faculty senate. Contrary to past trends, the first five years of the program's existence have resulted in few additions to the general education curriculum. Hopefully, the 2005 site visit team will be favorably impressed by SMSU's more focused and effective general education program.

Notes

All the quotations in this paper come from internal documents:

Constitution and By-Laws of the Faculty

Countdown to the SMSU Centennial: A Long Range Vision and Six-Year Plan (2000–2006)

The General Education Program, Southwest Missouri State University

NCA Report of a Visit to Southwest Missouri State (1985)

NCA Report of a Visit to Southwest Missouri State University (1995)

Welcoming the 21st Century: A Long Range Vision and Five-Year Plan (1995–2000)

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It Can Happen: General Education Reform Through Assessment

Eric Gardner, Diane Boehm, Clifford Dorne, and Mary Hedberg

Introduction

This session will detail Saginaw Valley State University's (SVSU) general education reform, which was spurred by a multi-layered assessment process. This paper offers the "who" and the "what"—the institutional context and the specifics of the assessment and reform processes. The session itself, while considering these issues, will focus more on the "how" and the "why" behind those processes. In this, through interactive discussion, we will invite session participants to place our work in dialogue with questions of general education, assessment, and curricular reform at their own institutions.

Who, What, etc.: Institutional Context and the Need for Change

SVSU is a regional comprehensive university with an enrollment of approximately 9000 students. It offers a range of bachelor's degree programs and a handful of master's degrees; though several of its students are transferees, it offers large and diverse programs for first- and second-year students.

University faculty are unionized and maintain a strong voice in curricular planning and development. A curriculum committee composed of six elected faculty members, two administrative appointments, and one student serves as the first level in the curricular approval process. Their decisions are then subject to full faculty approval and administrative approval.

Almost since its founding in 1963, SVSU has envisioned general education (GE) as a set of various content area requirements. Over time this conception progressed into a thirty-nine-credit-hour requirement spread over nine content categories—literature, arts, numerical understanding, natural sciences, historical and philosophical ideas, social science methodologies, social institutions, communication, and international perspectives.

Courses were placed in general education through the above-described process, but there was no oversight body, no standard review and/or expiration policy for GE courses, no statement of objectives for the program (though individual categories did have objectives), no criteria for the various categories, and no provision for ongoing assessment. Further, there were no regular institutional procedures in place to remove courses that were not serving the goals of GE, short of the department in question requesting to remove the course. For the most part, this did not occur because departments had rather powerful vested interests in maintaining courses in the GE program. Similarly, because there was a perception that individual departments (or small groups of departments) "owned" categories, there was little argument over adding additional courses—as long as a department did so in "its" category only. Thus, the 1990s saw a dizzying accumulation of more than 260 different courses in the program.

In 1994, NCA evaluators critiqued the SVSU GE program and echoed concerns that had spread across campus: that general education at SVSU needed sweeping reform. Initially, this led the faculty to create a statement of their rationale behind general education and then to assess the program in terms of this rationale.

Initial Assessment

In response to the NCA evaluators' critique, in 1995 SVSU submitted a plan to NCA that defined the steps we would take to answer the concerns raised and proposed a timetable for carrying out an assessment and revision of general education. One of the first things to be done was establish a committee to articulate SVSU's rationale for general education, defining what the institution wanted to accomplish through the general education program. In developing this mission statement, the committee proposed that general education should foster critical thinking, cognitive knowledge, and affective understanding along with oral and written communica-

tion skills. Once the faculty ratified the new rationale for general education, the question arose whether the general education program, with its various categories and large number of courses, accomplished these newly defined goals.

After considerable faculty-wide discussion, the faculty voted to declare a moratorium on adding or deleting courses from the general education categories for two years, while the program was assessed. A new committee was formed, which included administrators and faculty, to draft an assessment measure. Once an assessment process was agreed upon, Professor Hedberg was appointed to lead the general education assessment task force. The intent was for this process to include a large number of faculty from across the university, including senior as well as newer faculty. For four consecutive semesters, faculty task forces, composed of different individuals each time, although chaired by the same faculty member, presented large numbers of students with "prompts" selected by the committee.

The committees introduced these prompts, which included excerpts from films, book reviews, and analytical writing, to students in introductory as well as upper-division classes and asked students to respond both orally and in writing to a series of broad questions. Task force members then assessed the responses according to rubrics developed for each prompt. Although faculty on these committees were selected from a number of disciplines and approached evaluating responses in various ways, the conclusions were similar across the four semesters: students were adept at acquiring new information but had difficulty thinking critically about that information, applying it to new situations, seeing flaws in arguments based on that information, or recognizing rhetorical strategies used by authors and filmmakers to shape a viewpoint. All four task forces also noted that students at all levels demonstrated disappointing levels of oral and written communication skills.

The final report, presented by the chair of the task force to both the administration and the faculty, concluded that general education, as it was currently constituted, did not align with the rationale for general education and was not effectively accomplishing its defined goals.

Additional analysis showed that although there were large numbers of courses in each of the content categories that made up the general education program, most students fulfilled their general education requirements by taking a select number of these courses. In spite of the turf wars over courses approved for these categories, in actuality departments were not gaining significant numbers of students for most courses in the categories just because of their inclusion in one of the general education categories. By and large, courses had not been developed to accomplish general education program goals, and the courses that were attracting students were the introductory courses for majors.

Program Development

Building from the results of this initial assessment, SVSU embarked upon a major GE reform project requiring extensive strategic planning and consensus building among the faculty. Initially, an *ad hoc* committee composed primarily of faculty was formed. Their reform proposal did away with content categories and created, in their place, categories centered on abilities development and a basic goal statement: that general education should help students learn to think critically, reason logically, and communicate effectively. The proposal also removed all courses from the program and created a contractually recognized oversight body to evaluate courses submitted to the new program. By a narrow vote of the full university faculty, this first reform proposal was defeated.

After listening closely to various voices in the debate, a reconfigured group led by Professors Gardner and Dorne, submitted a second proposal the next semester. Though this proposal maintained the content categories (albeit in a revised form), it kept several large-scale reform elements; for example, it articulated not only an overall program goal, but also revised intersecting category goals and created descriptive criteria for categories; it created an oversight body with significant powers; it removed all courses from the program and required courses to be submitted to the new program; it allowed courses accepted into the program a five-year term and set up ongoing assessment mechanisms.

In a semester-long process, which included informational mailers, more than a hundred e-mail inquiries about the proposal, two lively campus-wide forums, presentations at formal curriculum committee meetings, and several meetings with individual faculty members and administrators, the proposal was revised and then unanimously approved by the full university faculty and administration in March 2000. The faculty union and the administration then negotiated a memorandum of understanding (an addendum to the faculty contract) that clarified procedural matters relevant to general education, especially the formation of the general education committee (GEC). This new GEC began accepting faculty proposals for courses, and SVSU first offered courses under the new GE program in fall 2001.

The General Education Committee (GEC)

Like other standing committees at SVSU, the GEC is composed of six elected faculty members (one from each of the curricular units), two administrative appointments (one of whom chairs the committee), and one student representative. It is charged with three main functions:

1. To receive and evaluate GE course proposals submitted by the academic departments for possible inclusion in the GE program. The evaluation process includes providing written feedback to the academic departments.

2. To receive and evaluate GE course assessment plans and assessment reports submitted by the departments. The GEC provides written feedback on both types of documents to the academic departments.

3. To report to the faculty and to the vice president for academic affairs and to advise on the planning of GE course schedules.

The New General Education Program

The new program currently has fifty-eight courses organized in ten content categories (literature, arts, numerical understanding, natural sciences, historical and philosophical understanding, social sciences, social institutions, international systems, oral communication, and written communication). All courses currently in the program went through the rigorous course approval process governed by the GEC and received five-year terms in the program. When courses are revised and/or resubmitted during or after this term, submitters are required to make use of ongoing assessment information. Course proposals were required to speak to the program's main goal: "to develop students' capacity to think critically, reason logically, and communicate effectively in a wide range of disciplines beyond their major field." Courses were also required to speak to a learning objective specific to the course's category (e.g., all courses in the literature category ask students to learn "to read major literary works critically with appreciation and understanding").

In addition to a specific student learning objective, each category is governed by a set of descriptive criteria. For example, literature courses must

- Offer practice with strategies of close reading and analysis of texts
- Consider a range of ways of responding to texts (which may include discussion of aesthetics, values, and ethics as they relate to texts)
- Consider texts' historical context
- Introduce students to a range of genres (e.g., fiction, poetry, drama) or a single genre examined over an extended period of time
- Consider literature from multiple cultures
- Meet or exceed all of the criteria for communication-intensive courses

Beyond the category and distribution requirements, the program calls for students to take three courses (one in literature and two chosen from the remaining categories other than oral and written communication) that are designated "communication-intensive" courses; such courses are required to meet additional criteria tied to written and oral communication. Students are also required to complete their courses in numerical understanding, oral communication, and written communication prior to completing seventy-five total credit hours.

Assessing the New Program

SVSU is assessing the new program in three ways.

◇ **Departmentally-generated assessment.** Departments that have courses in the program are required to submit assessment plans to the GEC, which then provides feedback and counseling. Assessment plans specify the ways in which student learning (in terms of both the program's main goal and the course's category-specific objective) will be measured, ideally through both quantitative and qualitative means. After plans are approved, departments are asked to submit annual reports on their assessment work; as with assessment plans, the GEC offers feedback and counseling on these documents. The GEC maintains plans and reports for faculty across campus to use as models.

During the first year of GE assessment, most departments were able to comply with the assessment policy. The remaining departments experienced difficulties in two areas: the need to fully and overtly integrate the goals of the GE program into the course planning process, and the need to develop measures that specifically spoke to program goals (in addition to discipline-specific or course-specific goals).

◇ **Standardized testing and surveying.** In fall 2002 the SVSU Assessment Office, working with the GEC and the academic departments, fully implemented two standardized instruments that were initially piloted in fall 2001: three subtests of the Collegiate Assessment of Academic Proficiency (critical thinking, writing skills, and writing: essay) and the Cooperative Institutional Research Program Freshman Survey. Initial data are now being analyzed and compared to information in departmentally generated assessment work.

◇ **Assessment of processes.** Additionally, the GEC is continually assessing the course submission and assessment oversight processes. A key early piece in this process was the institution of a series of faculty focus groups held this past summer.

Closing the Loop

The GEC is now beginning to issue annual reports to the university community that summarize work in the program. We expect that, like all living programs, our general education program will need to continuously improve, and the GEC sees one of its central goals as creating and widely sharing a paper trail of assessment information to aid in future revisions.

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Assessing the Achievement of General Education Objectives: Four Years of Assessment

Irene Kovala, Trudy Bers, Gary Mines, and Suzanne Stock

The Setting

Oakton Community College is a public community college located in the north shore suburbs of Chicago. The college's district is affluent, with nationally known public schools and a strong commitment to education. The combination of the high socioeconomic status of residents and expectations that high school graduates will go to college results in a college-going rate ranging from 80 to 95 percent among recent high school graduates, including even those who do not meet traditional academic standards for college success.

The student population of Oakton Community College includes a large percentage of foreign-born students whose native language is not English—upwards of 20 percent—and a large percentage of students who already hold a bachelor's degree or above—about 20 to 25 percent. Eighty percent of students are part-time; students' average age is thirty, and 45 percent are above the age of twenty-four. Each fall 30 percent of students are new to the institution, including reverse transfers who previously attended other colleges. In the spring the percentage of new students drops to about 12 percent.

Two-thirds of students are in baccalaureate-transfer programs, though this figure is somewhat misleading, since many bachelor's degree students are categorized in transfer programs even though they are taking courses primarily to learn job-related skills or for personal enrichment. As is the case at most community colleges, only a small percentage of students complete associate degrees or certificates (about 5 percent of the total student population). Most students who transfer do so before earning a degree.

Project Description

In spring 2002 a general education subcommittee of the Oakton Student Academic Assessment Team (SAAT) conducted the fourth year of its project to assess general education learning outcomes. Students read or watched a prompt, then answered questions about the prompts. Prompts and questions were designed to assess students' achievements on four general education objectives:

- Construct hypotheses (two different prompts were used to assess achievement of this objective)
- Analyze and interpret data and information
- Recognize skills necessary to build and maintain effective human relationships
- Effectively communicate ideas in writing

Prompts for the first two objectives were written. The last two objectives were assessed using the same prompt, which was a video clip from the film *Ordinary People*. Trained faculty used scoring rubrics to assess students' answers. Rubrics were based on a three-level scoring system, with the top two levels indicating that a student met standards for general education objectives addressed on that prompt. Two different scoring rubrics were used to score the students' answers to the film clip questions, one dealing with the objective of recognizing skills necessary to build and maintain effective human relationships and the other dealing with the objective of effectively communicating ideas in writing.

Students in eighty-eight classes with large numbers of students who had earned thirty or more credits at Oakton participated in the 2002 general education assessment. A total of 1,165 students responded to one or more of the general education assessment prompts, and a total of 1,664 responses were scored. Recall that responses for one prompt were scored twice, and a handful of students may have completed more than one prompt.

We obtained data for the project from both the students' scores on their responses and the college's student information management system. The dependent variable is the student's achievement on the prompt. We also identified a number of demographic and academic variables to use as controls: age, gender, cumulative grade point average, cumulative college-level credits at Oakton, English composition proficiency, mathematics proficiency, and number of general education areas in which students had taken courses either at Oakton or elsewhere (this was based on students' self-reports).[1]

Results

Researchers examined the association between a number of student demographic and academic characteristics and students' achievement levels on the prompts.

◇ Overall, 67 percent of responses received passing scores; that is, students met standards on general education objectives. Of all responses, 345 (21 percent) were scored as high passes, 767 (46 percent) were scored as low passes, and 552 (33 percent) were scored as no passes. The number of responses scored for each prompt and percent of students who passed is presented in the table.

	Objective: Construct Hypotheses Prompt: AIDS and drug use N=294		Objective: Construct Hypotheses Prompt: Fetal heart rate N=261		Objective: Analyze and Interpret Data/Info Prompt: Circle graph—age and AIDS N=386		Objective: Human Relations Prompt: film clip N=356		Objective: Communicate Clearly in Writing Prompt: film clip N=367	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
High Pass	41	14	53	20	126	33	38	11	87	24
Low Pass	130	44	116	44	168	42	182	51	171	47
No Pass	123	42	92	35	92	24	136	38	109	30

◇ Fifty-three percent of students whose work was scored for both recognizing skills necessary to build and maintain effective human relationships and effectively communicating ideas in writing—the same prompt was used for both objectives—received passing scores on both rubrics applied to the prompt. Scoring the same response with two rubrics enables us to explore whether the same student has achieved standards on two general education objectives.

◇ Statistically significant associations[2] between independent variables and achievements on general education objectives were as follows.

- Gender was associated with achievements on the objectives of human relations and effective writing (film clip prompt). A higher percentage of females than males received passing scores when answers were scored on both the human relations rubric (68 percent of females passed and 53 percent of males passed) and the effective writing rubric (78 percent of females passed and 60 percent of males passed).
- Age was associated with students' responses to the AIDS and drug use prompt to assess achievement of the general education objective of constructing hypotheses; 62 percent of students under the age of twenty-five and 49 percent of students age twenty-five and older who responded to this prompt received passing scores.
- Cumulative credits earned at Oakton were associated with only one prompt, the fetal heart rate prompt to assess achievement of the general education objective of constructing hypotheses. Students who had earned either fewer than thirty credits or forty-five or more credits had the highest pass rates (68 percent and 70 percent respectively), whereas only 43 percent of students who had earned thirty to forty-four credits received passing scores.
- Cumulative grade point average at Oakton was associated with achievements for the two general education objectives of effective writing and human relations. Students who had higher grade point averages were more likely to achieve standards.
- Students' competence in mathematics was not associated with achievement on any of the objectives.
- Students' competence in English composition was associated with achievement on all objectives except the one for human relations. Students with college-level competency and those for whom there was no information about

competency received a substantially higher percent of passing scores than students with remedial-level competency (relatively few students were categorized at the remedial-level).

- The number of general education areas in which a student reported taking courses was associated with achievement on two objectives: constructing hypotheses as measured by the prompt about AIDS and drug use, and analyzing and interpreting data and information. Overall, most students reported having taken courses in three or more general education areas, and generally they had higher percentages of passing scores than students who reported taking courses in fewer general education areas.

◇ The percentage of students who achieved passing scores on the general education assessment varied in each of the four years of this general education assessment project (1999–2002). In 1999, 59 percent passed; in 2000, 77 percent passed; in 2001, 64 percent passed; and in 2002, 67 percent passed. In 2000, one prompt was answered in a multiple-choice format, and 95 percent of students achieved passing scores, skewing results for that year. Differences in the prompts, scoring rubrics, general education objectives, instructions to students, and reader procedures across the years make it inappropriate to compare achievements from one year to the next.

Factors Fostering the Success of the Project

Five key factors were instrumental in fostering success of the assessment project: (1) high-level faculty and administrative leadership of the Student Academic Assessment Team and faculty involvement, (2) moving the assessment of general education outcomes to a college rather than departmental level, (3) initiating the project as a pilot, (4) refusal to attribute blame, praise, or excuses for student performances, and (5) a four-year record of implementing the assessment—that is, beginning to institutionalize it.

First, high-level faculty and administrative leadership of the Student Academic Assessment Team and the involvement of faculty in developing and scoring the prompts demonstrated both institutional commitment and faculty buy-in to the project. The team has always been co-chaired by the vice president for academic affairs; the first co-chair was the faculty senate president, and the current co-chair is another faculty member (the current faculty senate president is a member of the team).

Second, by having the Student Academic Assessment Team take the lead role in assessing general education outcomes, individual departments teaching general education courses are able to concentrate their assessment efforts at the classroom, course, and program levels. This approach and the fact that students in a variety of classes, not just general education courses, participated emphasize that general education is a college-wide, not a departmental, responsibility.

Third, the college initiated and implemented this assessment project as a pilot. Doing so fostered senses of experimentation and relief. Faculty participants recognized that because this was a pilot, the process could be modified to accommodate unforeseen difficulties or experiences. Conceptualizing the project as a pilot implicitly gave the institution permission to make mistakes as part if its own learning experience. Though not planned, the SAAT members and the prompt readers formed mini-learning communities in which the topic of their learning was general education assessment. By the third and fourth year the term *pilot* was dropped.

Fourth, in evaluating results, there has been no attribution of praise, blame, or excuses for student performances. Faculty members seem to recognize that results may be due to a combination of factors: weaknesses in the assessment project itself, students' not taking their work on the assessment prompt seriously; lack of writing and communication competency; and other reasons may have all contributed. This recognition has begun to spark good discussions among faculty about assessment as a process and about student learning outcomes and competencies.

Finally, the project has been conducted for four years, beginning in 1999. Though the nature of prompts and the details of implementation varied, the general approach remained the same. While it is difficult to know exactly when a "pilot" becomes "ongoing," and when an "ongoing" project becomes "institutionalized," the college continues to be committed to assessing general education learning outcomes across the institution under the umbrella of the Student Academic Assessment Team.

Next Steps

Two important next steps relate to faculty discussion about general education assessment results and a revised approach to be implemented in spring 2003.

◇ **Faculty discussions.** Early in the spring 2003 semester, faculty will be asked to discuss assessment of courses, programs, and general education outcomes at departmental or division meetings. One purpose in convening these discussions is for faculty, more than a third of whom joined the college within the past three years, to become more familiar with assessment

overall. A second purpose is to engage faculty in considering how they might incorporate teaching general education objectives in courses across the curriculum, not just in traditional general education disciplines.

- ◇ **Revised approach.** The SAAT subcommittee is planning to broaden its approach to assessing general education outcomes in spring 2003. The specific objectives to be assessed in 2003 are
  - o Communicate...effectively in...speech [presentations]
  - o Work and communicate effectively with people from a variety of backgrounds, individually and in teams

The subcommittee will be identifying classes in which assignments involve presentations or working in groups (teams). Faculty teaching the classes will be asked to volunteer to have students' presentations or work in teams assessed by trained observers using a scoring rubric. Their assessments will be based on regular classroom assignments but will not be part of students' grades. This revised approach should enable the college to begin to assess students' achievement of general education outcomes that do not lend themselves to paper-and-pencil responses or tests.

Notes

[1] Most variables need no further explanation; however, two warrant elaboration. English competency was constructed as a proxy to depict students' proficiency in English composition based on courses and placement tests at the institution. Transcript and placement test records were examined, and students were placed into mutually exclusive categories in descending order of demonstrated proficiency. That is, all students who had received grades of A, B, or C in a college-level composition course were considered to be in the highest category of composition proficiency; those who had enrolled or placed into a college-level composition course were in the next highest level, and so on. Students for whom no data were available were arbitrarily assigned to the lowest category. The same approach was used to classify students according to their competency in mathematics, with intermediate algebra considered separately from college algebra and other college-level courses because it is not typically accepted for transfer and is a prerequisite for other college-level courses.

[2] "Statistical significance" simply means that the association between the independent and dependent variable is stronger than we would expect from chance alone. Statistical significance is often attained when sample sizes are large, even when there is no practical or substantive significance. We took some latitude in identifying statistical significance because in some instances the number of cases in a cell was quite small, indicating that the chi-square may not be a valid test.

Additional Information

Additional information about the Oakton general education assessment is available in these resources.

Bers, Trudy H. 2000. Assessing the achievement of general education objectives: Second year of a college-wide approach and lessons learned. *Journal of Applied Research in the Community College* 7(2).

Bers, Trudy H. 2000. Assessing the achievement of general education objectives: A college-wide approach. *Journal of General Education*. 49(3).

Bers, Trudy H. 2002. Assessing the achievement of general education objectives: Four years of assessment. Unpublished Report. Office of Research, Oakton Community College, September.

Bers, Trudy H., B. D. Davis, and M. L. Mittler. 2001. Assessing the achievement of general education objectives in the community college: A project across the disciplines. *Assessment Update*, May/June.

Also see <http://www.oakton.edu/resource/oir/resmenu.html>.

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Effective General Education Assessment at Large Public Institutions

Julie Wallin and Brenda Masters

Introduction

General education assessment presents unique challenges compared to assessment within a degree program, particularly at large public institutions. Although the ideal is to approach general education assessment in the same manner as program outcomes assessment, the nature of general education often presents obstacles that make its assessment vastly different from assessment in the major. For example, general education practices at larger institutions may include these obstacles:

- Students select a few courses from hundreds that are designated as part of the general education curriculum.
- Students often transfer general education credit hours from other institutions.
- Some general education courses are large and may be taught by non-faculty instructors.
- Few faculty members claim ownership of the general education curriculum as a whole.
- The process for evaluating or designating general education courses does not incorporate information from student learning assessment.
- Logistical constraints prevent institutions from requiring students to participate in assessments that occur outside of classes.
- Students rebuff participation in assessments not related to grades.

A great deal can be learned from examining how peer institutions approach general education assessment, facilitate faculty leadership of general education assessment, and use general education assessment results to effect change. We present these aspects of general education assessment at Oklahoma State University (OSU), a large, public, land-grant institution.

Development of the General Education Assessment Model

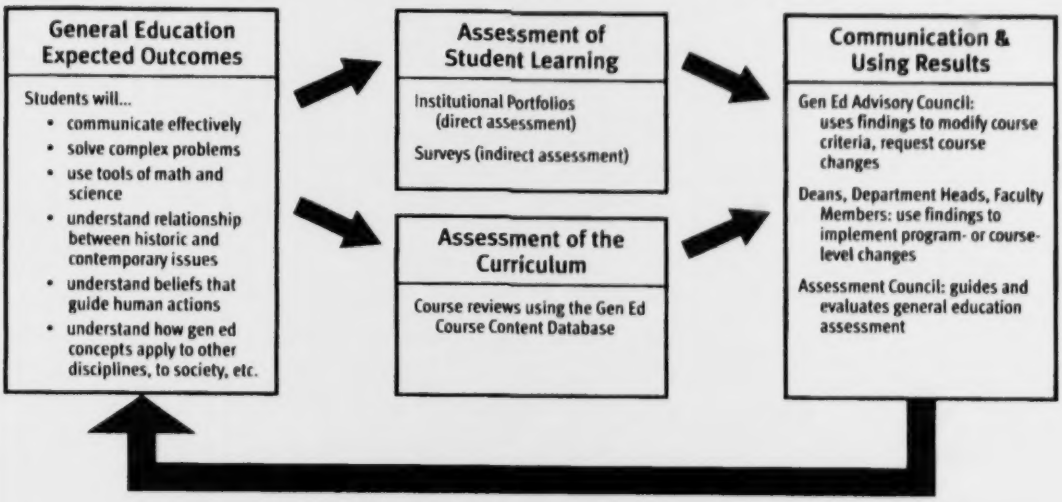
As a result of a state regents' mandate and regional accreditation requirements, OSU has used several general education assessment tools over the past decade, including standardized tests, student surveys, and student portfolios. However, none of these has evolved into a sustainable process for long-term general education assessment because of logistical problems associated with methods themselves (including student participation) and difficulty in effectively using the results for evaluating or developing the general education program as a whole.

In 2000 a faculty task group was appointed to develop an effective and sustainable general education assessment program for OSU. The group members represented a range of disciplines and were paid summer stipends. Following the assessment standard of articulating desired student outcomes first (Taylor & Marienau, 1997), the group started by revising OSU's "Criteria and Goals for General Education Courses" document and identifying assessable outcomes for the general education program. Most importantly, the group developed guidelines for effective and sustainable general education assessment that included these principles:

- The process must not be aimed at individual faculty members or departments.
- The process should be led by faculty members, and faculty participation should be voluntary.
- The process should use student work already produced in courses.
- The process should assess all undergraduates, including transfer students, because general education outcomes describe qualities expected for all students.

This last principle is particularly important because it articulates the view that students' general education skills (writing, problem solving, etc.) are not exclusively developed in the general education curriculum and should not be assessed solely within those courses.

After studying general education assessment methods from other institutions, the faculty group developed a model for general education assessment that included assessments that met these guidelines. The model included institutional portfolios for evaluating student achievement of general education outcomes, surveys that provide indirect information about student achievement of those outcomes, and an evaluation the general education curriculum via an online course content database.


General Education Expected Outcomes
Students will...
• communicate effectively
• solve complex problems
• use tools of math and science
• understand relationship between historic and contemporary issues
• understand beliefs that guide human actions
• understand how gen ed concepts apply to other disciplines, to society, etc.
Assessment of Student Learning
Institutional Portfolios (direct assessment)
Surveys (indirect assessment)
Assessment of the Curriculum
Course reviews using the Gen Ed Course Content Database
Communication & Using Results
Gen Ed Advisory Council: uses findings to modify course criteria, request course changes
Deans, Department Heads, Faculty Members: use findings to implement program- or course-level changes
Assessment Council: guides and evaluates general education assessment

Institutional Portfolios: Evaluating Student Achievement of General Education Learner Goals

OSU currently evaluates students' written communication and math problem-solving skills via institutional portfolios, and portfolios are being developed to evaluate science skills and complex problem-solving skills. The institutional portfolios are patterned after those used at Johnson County Community College (Seybert & O'Hara, 1997). A separate institutional portfolio is (or will be) developed to target each general education outcome (e.g., written communication skills), and each portfolio includes a random selection of student work demonstrating that outcome in a range of courses (general education and major courses). The sampling is loosely stratified so that the portfolio includes assignments from a variety of disciplines and levels (freshman- through senior-level work). Faculty members evaluate the students' work in each portfolio using a scoring matrix (rubric) that describes the general education competency being assessed. By rotating the faculty reviewers so that continuing members teach the portfolio scoring techniques to new members, the review process is standardized from year to year. This is essential for reasonably combining the institutional portfolio data over years.

The two years of writing assessment data have produced an overall pattern of student writing skills where, on a 5-point scoring scale, 66 percent of all students demonstrate writing skills of 3 or higher and 21 percent of all students demonstrate writing skills of 4 or higher. The data show patterns of improvement in writing skills from freshmen to seniors and show that writing skills of students who start at OSU as first-time freshmen are somewhat higher than writing skills of transfer students. Most importantly, these preliminary data demonstrate how institutional portfolio results may be analyzed to evaluate writing skills or other general education outcomes in the student body. Institutional portfolios seem to provide reliable measures of student learning, especially if the portfolios are evaluated by faculty who are trained to use a rubric to standardize their scoring of student work.

Although longitudinal portfolios that track the work of *individual* students are widely used as local assessment measures (El-Khawas, 1995), this type of *institutional* portfolio is less common and provides more of a snapshot of skills demonstrated in the student body. Institutional portfolios do not demonstrate individual student development, but they are logistically easier to produce; they represent the entire student body (including transfer students); and they provide many of the same advantages as individual portfolios—they directly assess learning and are evaluated based on criteria established by faculty (Palomba & Banta, 1999). Institutional portfolios at OSU are starting to provide useful information for program improvement. For example, the faculty committee that sets the standards for general education courses is considering modifying the criteria for general education courses in response to the institutional portfolio findings, and several faculty involved in the review process have made department- or course-level changes as a result of this assessment process.

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Surveys: Indirect Assessments of General Education

OSU's general education assessment model also includes indirect evidence of student achievement of general education outcomes via surveys. OSU participates bi-annually in the National Survey of Student Engagement (NSSE, administered by the Indiana University Center for Postsecondary Research Planning) and College Student Survey (administered by the University of California Los Angeles Higher Education Research Institute), and the university coordinates annual alumni surveys that target recent graduates. Survey results complement the information collected from institutional portfolios. For example, NSSE results indicate that OSU students do not complete as many writing assignments as students at peer institutions, and this has contributed to the dialogue regarding findings from the writing skills assessment portfolio.

General Education Course Database: Evaluating the Curriculum

Evaluating the curriculum itself complements assessments of student learning. The Web-based General Education Course Database was developed to evaluate course content and determine how each general education course is aligned with specific expected general education learning outcomes. The course content database replaces a long-standing paper-based course review process and has the advantage of utilizing data mining techniques for examining the general education curriculum in a variety of ways. A faculty advisory council reviews all general education courses every three to five years. The reviews are based on course information provided by instructors via online database forms. Specifically, instructors identify how their course incorporates one or more of the expected outcomes for general education and how student achievement of that outcome is evaluated within the course. Instructors also identify course activities related to general education goals (e.g., how often do students write papers, give oral presentations, discuss how the course content relates to contemporary issues).

The database now contains information from about 30 percent of all general education courses in the curriculum, and the remaining courses will be added in the next academic year. When completed, the database will be used to evaluate how and where the curriculum addresses each general education learner goal. Combined with transcript analysis, the database will also show the frequency with which students enroll in courses targeting specific general education outcomes and how frequently students are exposed to particular general education concepts. Although the database does not provide a measure of student learning, it has become a critical tool for examining the curriculum relative to specific general education outcomes.

Why the Model Works

Now in its third year of implementation, the OSU assessment model is beginning to yield useful information and gain faculty support and momentum. Although its sustainability is still unproven, the aspects of the model that are working are evident. They include the following.

- **Faculty leadership.** The model has been developed entirely by faculty representing a variety of disciplines. The chief academic officer has supported this group; faculty receive summer stipends for their work on general education assessment; and the group has considerable logistical support for its activities from OSU's central assessment office. The group has established membership rotation to ensure the continuation of faculty support, and the portfolio reviews include increasing numbers of faculty members each year.

- **A holistic approach with multiple measures.** The model presents a holistic approach to evaluating general education and carefully avoids focus (and potential blame) on individual disciplines or faculty groups. Student learning assessments (institutional portfolios and surveys) examine student progress toward attaining general education outcomes university-wide, and the course evaluation process (via the course content database) looks at how frequently general education courses include opportunities for students to develop particular general education skills. If or when these assessments converge on similar findings (e.g., the need to focus attention on student written communication skills), faculty leaders are empowered to identify and implement steps toward program improvement.

- **Using student work already produced in the curriculum.** Institutional portfolios are now a cornerstone of OSU's general education assessment program, and as Jeffrey Seybert has aptly stated about institutional portfolios at Johnson County Community College, the portfolios "obviate the need for motivating students to participate in assessment." Institutional portfolios are transparent to students, protect student privacy, and accurately represent the student body in assessment results.

- **Communicating results.** The faculty group has established processes for communicating results of its work through an annual newsletter for faculty and annual presentations to administrative and faculty groups.

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Obstacles to General Education Assessment and Alternative Solutions

At this point in the presentation, session attendees at each table will be asked to identify and discuss, based on experiences on their own campuses, other approaches to and obstacles to general education assessment. The session leaders will circulate among groups and record alternative methods and obstacles. The remainder of the session will be an audience-participation discussion of different general education assessment tools, factors that contribute to success or failure of general education assessment initiatives, and other examples of how institutions have overcome the common obstacles to effective general education assessment.

Overview

- The general education assessment model at Oklahoma State University includes a variety of methods. Institutional portfolios provide direct evidence of student learning; surveys indirectly assess students' general education experiences; and the curriculum can be evaluated via a course content database. The use of multiple assessment methods provides a more accurate gauge of student learning outcomes than any method individually.
- This general education assessment approach satisfies basic principles established by faculty for sustainable assessment. The process is led by faculty; faculty participation is voluntary; and the primary assessment tool uses student work already produced in courses (including general education courses and major courses). The process holistically evaluates general education and encompasses all undergraduates, including transfer students.
- Information generated from assessment should be thoroughly shared with various campus constituents where it can be used to effect positive change in the learning environment.

References

El-Khawas, E. 1995. *Campus Trends, 1995*. Higher Education Panel Report No. 85. Washington, DC:. American Council on Education.

Palomba, C. A., and T. W. Banta. 1999. *Assessment essentials: Planning, implementing and improving assessment in higher education*. San Francisco: Jossey-Bass.

Seybert, J. A., and K. A. O'Hara. 1997. Development of a performance-based model for assessment of general education. *Assessment Update*, 9(4): 5–7.

Taylor, K., and C. Marienau. 1997. Constructive-development theory as a framework for assessment in higher education. *Assessment and Evaluation in Higher Education* 22(2).

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Assessing the Ineffable Outcomes of General Education Through Electronic Student Portfolios

Sharon J. Hamilton

This session addresses the confluence of three facets of higher education: general education, assessment, and electronic student portfolios. It responds to the challenge set forth by Richard Shavelson and Leta Huang in the January/February 2003 issue of *Change*, wherein they assert "the absence of a coherent conceptual framework that would align assessments with the valued outcomes of higher education" (p. 11). This session will present one example of a coherent conceptual framework that attempts to align assessment and valued learning outcomes that transcend domain-specific knowledge.

A Brief Background

Individual faculty are variously experienced and adept at assessing domain-specific knowledge and abilities, but much less experienced and adept at assessing ways of knowing across a range of domains. Departments, academic programs, and institutions are increasingly interested in assessing knowledge and abilities across a range of domains. Some institutions use standardized tests, such as the CAAP (ACT's Collegiate Assessment of Academic Proficiency) the ETS Tasks in Critical Thinking, or the ETS Academic Profile. Increasingly, however, institutions are turning to electronic student portfolios to assess student learning both within and across domains. Alverno College and Rose-Hulman Institute of Technology have developed quite different yet equally impressive electronic student portfolios to show both improvement and achievement in student learning.

Recently, several national consortia have been instituted to share the enormous cost of developing electronic student portfolios. Additionally, AAHE, NLII, and other organizations have been establishing nationwide networks of faculty, staff, and administrators involved with the development of electronic student portfolios. These networks and consortia address issues of cost, security, transportability, and efficacy, and share responsibilities for the development of different functions within the portfolios being developed.

Electronic student portfolios are as variable as the institutions involved in their development. While most have several functionalities, each one generally focuses on a primary function, whether it be advising, career search, assessment of learning, or demonstration of proficiencies.

While acknowledging the broader context of portfolio development across the country, this session will focus primarily on the development of the IUPUI portfolio, which attempts not only to demonstrate and assess improvement and achievement in student learning but also to catalyze deeper and more coherent learning within the major and across subject domains.

The Ineffables of Undergraduate Education

Faculty-based assessment of individual students focuses almost exclusively on cognitive abilities, and many will argue that this is exactly as it should be. At the same time, most faculty will also agree that education is about much more than what is generally assessed on final examinations. If we were to gather groups of faculty from around the nation, and ask each group to identify what undergraduate education hopes to achieve, most would come up with fairly similar lists: students emerging from higher education with baccalaureate degrees should have knowledge and skills that go beyond the cognitive and that include personal, social, and civic attributes. Expectations for our graduates would include enhancing values and ethics, critical thinking, integrating and applying knowledge, responsible citizenship, appreciating diversity, or aesthetic discernment. Yet we rarely assess improvement and achievement in these areas. We rarely even try to agree on what we mean by them, which is why they are often referred to as "the ineffables of education." But without these ineffables, of what value is cognitive proficiency. As Theodore Hamerow wrote in *Reflections on History and Historians* (1987):

> Himmler... knew the classics well, but they did not teach him much kindness. Goebbels had studied literature and history...without learning generosity or compassion. What the humanities bring to the student is what the student brings to the humanities. If he likes art or music, they may make him more appreciative;...if he is interested in literature, they might make him more knowledgeable...But they cannot teach wisdom or virtue; they cannot...mold human character.

Some of us may respond that that is exactly right: we are not in the business of teaching virtue or molding human character. Others among us may wonder, though, what education is all about if it does not shape character or lead toward virtue and wisdom. It's a thorny issue, and one not likely to lead to agreement, particularly within the confines of one presentation. But, for many of us, it is among these ineffables of education that the value and coherence of education reside.

This presentation will show how the IUPUI electronic student portfolio presents a conceptual framework that integrates domain-specific cognitive knowledge with the cross-disciplinary ineffables of learning to demonstrate and assess improvement and achievement in both.

The Ineffables of Education at IUPUI

In 1998, after almost ten years of dialogue involving several hundred faculty members, the IUPUI Faculty Council approved six principles of undergraduate learning (PULs):

1. **Core communication and quantitative skills.** The foundational areas of writing, reading, speaking, listening, quantitative analysis, and use of information technology—the core skills for IUPUI students—are demonstrated, respectively, by the ability to

    a. Express ideas, opinions, beliefs, and facts to others effectively in a variety of written formats (i.e., basic writing composition, general written communication, and professional or research writing)

    b. Comprehend, interpret, and analyze written text in reading

    c. Communicate effectively (speak *and* listen) one-on-one and in small and large group settings, as well as identify factors that facilitate and impede communication

    d. Perform quantitative functions and analyses

    e. Use information technology for academic, personal, and professional needs

    These foundational skills are introduced in specific courses and developed and extended throughout the disciplines.

2. **Critical thinking** is a sophisticated cognitive process that involves the careful examination of ideas and information from multiple perspectives in order to clarify and improve understanding and to develop ideas that are unique, useful, and worthy of further elaboration. Critical thinking is demonstrated by

    a. Solving challenging problems

    b. Analyzing complex issues and making informed decisions

    c. Synthesizing information to arrive at reasoned conclusions

    d. Evaluating the logic, relevance, and validity of data

    e. Using knowledge and understanding to raise and explore new questions

3. **Intellectual depth, breadth, and adaptiveness** is the ability to examine, organize, and apply disciplinary ways of knowing to specific issues. Intellectual depth is demonstrated by substantial knowledge in one area, usually the major, but, where applicable, in a minor or other concentration of study. Intellectual breadth is demonstrated by the ability to compare and contrast approaches to knowledge in different disciplines and by the ability to define what counts as evidence in each discipline. Adaptiveness is demonstrated by modifying one's approach to a problem or question based on the requirements of a particular situation.

4. **Integration and application of knowledge.** Integration of knowledge is demonstrated when students articulate and apply concepts or constructs from two or more disciplinary areas to personal, academic, professional, or community activities. Application of knowledge occurs when students participate in experiences that enable them to link their knowledge to their own intellectual development, to their professional goals, and to the goals of society.

5. **Understanding society and culture** is the ability to place one's own cultural traditions in a broader human context. This ability is demonstrated by writing, actions, and speech that indicate knowledge of the range of diversity in traditions, history, and values.

6. **Values and ethics.** An undergraduate education fosters the development of a sense of aesthetics, values, and ethical standards. The enactment of values and ethics occurs when students make informed and ethical decisions in their personal, academic, and professional endeavors.

In 2001, the faculty committee guiding the development of the electronic student portfolio decided that one way to show improvement and achievement in the PULs was to determine what all students should know and be able to do in relation to each PUL at three levels: introductory (by the end of twenty-six credit hours), intermediate (by the end of fifty-six credit hours; the equivalent of an associates degree), and senior (before graduation). We established a multidisciplinary committee for each of the PULs to develop campus consensus on the first two levels regardless of major or professional program, leaving each department or academic program to define competence at the senior level. Recognizing that growth in the ineffables of education also occurs in co-curricular, extra-curricular, and other activities, we added a fourth level: the experiential level, students can select for their portfolios examples of growth in learning from out-of-classroom experiences (that may well have been influenced by in-class experiences).

Coming to multidisciplinary consensus on learning outcomes related to ineffable goals such as critical thinking, values and ethics, integrating and applying knowledge, and valuing diversity has been no easy task. Even so, almost a hundred faculty members have been engaged in this process for the past six months. Once their reports are in, they will be distributed to all academic and professional schools for further refinement and then sent through the faculty governance process.

Assessment of improvement and achievement in the PULs will be carried out according to the consensually developed learning outcomes articulated by the multidisciplinary campus committees. The learning matrix of the electronic student portfolio will provide the mechanism for this demonstration and assessment of improvement and achievement.

The IUPUI Learning Matrix

The learning matrix is at the core of the IUPUI electronic student portfolio. Students select and upload completed and graded assignments from their courses that they think demonstrate proficiency in one (or more) facets of one (or more) of the PULs. In so doing, they come to see how these PULs transcend any one course or major while at the same time realizing that they are deeply embedded in many courses and academic programs.

Principle of Undergraduate Learning	Introductory	Intermediate	Advanced	Experiential
1a. Core Skills: Written Communication	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
1b. Core Skills: Analyzing Texts	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
1c. Core Skills: Oral Communication	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
1d. Core Skills: Quantitative Problem Solving	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
1e. Core Skills: Information Literacy	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
2. Critical Thinking	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection

Principle of Undergraduate Learning	Introductory	Intermediate	Advanced	Experiential
3. Integration and Application of Knowledge	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
4. Intellectual Depth, Breadth, and Adaptiveness	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
5. Understanding Society and Culture	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection
6. Values and Ethics	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection	Add/Edit Help Reflection

There are several significant features to this matrix.

- It provides an opportunity to demonstrate both improvement and achievement in the PULs using completed assignments from students' regular courses.
- It tracks improvement and achievement in all the PULs throughout the student's academic career on one page.
- It acknowledges that learning occurs outside as well as inside the classroom by allowing for co-curricular and extra-curricular examples in the experiential column of the matrix.
- The reflective component enhances learning by serving as a catalyst for metacognitive thinking about the documents the student chooses to demonstrate proficiency.
- It will be integrated with the registrar's office, so that students will receive automated replies whenever they upload a document and automated congratulations whenever they complete a cell in the matrix.
- Each completed cell will turn a different color from the uncompleted cells, so that students can see exactly where they are in relation to the PULs.
- Completed cells will be e-mailed automatically to one of the evaluators (most likely a member of the IUPUI Senior Academy of retired faculty members who want to stay involved with the campus), who will respond directly to the students' reflective writing. This interaction beyond the bounds of the classroom should further enhance learning and student motivation.
- For department-wide, program-wide, or campus-wide assessment, completed cells may be aggregated and assessed in order to track improvement and achievement in student learning beyond the level of the individual student.

While the IUPUI electronic student portfolio is still in its developmental stages, we are excited about its potential to demonstrate and assess improvement and achievement in student learning, as well as to enhance deeper learning and provide coherence to the undergraduate curriculum. In a university with more than twenty academic and professional schools, this is quite a challenge. We look forward to hearing the responses and ideas of participants in this session, to learning from their questions and concerns, and to working together to develop meaningful ways to assess what we value in higher education.

References

Hamerow, Theodore. 1987. *Reflections on history and historians*, quoted in *Change*, January/February 2003: 7.

Shavelson, Richard, and Leta Huang. 2003. Responding responsibly to the frenzy to assess learning in higher education. *Change* 35(1): 10.

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Assessing Critical Thinking In the General Education Program

Becky J. Chadwick and Kim D. Schopmeyer

The Importance of Critical Thinking in General Education

In the last two decades, critical thinking skills have increasingly become identified as key components of general education in elementary, secondary, and higher education. It is no longer considered sufficient for students to simply acquire a body of facts and information. Rather, educators and employers recognize that education should lead to broader abilities to analyze and evaluate information and to develop approaches to solving problems. Moreover, critical thinking skills are often cited as essential to effective citizenship, allowing members of society to understand key social issues and problems and make informed decisions.

As a result, critical thinking is frequently embodied in the mission statements of colleges and in general education programs. With a growing emphasis on learner-centered pedagogy and assessment, teaching and assessing critical thinking have become important challenges facing educators. Because much of traditional instruction has focused on the learning of facts and information, teachers find themselves facing new expectations that require them to achieve different kinds of learning outcomes. In order to assist educators in meeting the challenges associated with this transition, it is important to provide a framework that provides support and clarification, while retaining as much professional autonomy as possible.

Henry Ford Community College (HFCC) has developed an approach to incorporating critical thinking into its general education program that seeks to achieve these goals. The main objectives have focused on (1) developing an awareness of the importance of critical thinking among faculty and students and (2) fostering a willingness to incorporate the teaching and assessment of critical thinking into the curriculum on a widespread basis.

How Did Critical Thinking Become a Learning Outcome at HFCC?

In 1996, Henry Ford Community College began the process of developing general education outcomes. An initial survey was distributed to faculty, staff, advisory committee members, and potential employers asking what educational outcomes associate degree graduates should be able to demonstrate. As a result of this survey, ten broad categories were identified: communication skills, critical thinking, humanities/arts, technology and information acquisition, quantitative literacy, scientific literacy, American heritage and cultural diversity, human relations/work ethic, health awareness, and lifelong learning.

This list served as an initial guide to narrow and focus the viewpoints of the college community. The list was distributed to four academic areas of the college and to a group of employers and program advisory committees to identify which outcomes were deemed essential for degree graduates. Consensus emerged around four major outcomes. They included communication skills, critical thinking, technology and information literacy, and American heritage and cultural diversity. These outcomes were subsequently adopted by the college senate and college organization as a whole.

Four campus-wide faculty forums were held to solicit further input from the college community and to develop specific language for the general education outcomes. These were approved by the college organization in January 1997. According to the HFCC assessment plan:

All associate degree recipients from Henry Ford Community College will be able to demonstrate:

1. *Proficiency in reading and writing in standard English.*
2. *Computer literacy in the retrieval, analysis and evaluation, processing, and delivery of information in order to participate in a technologically oriented society.*
3. *Understanding of the foundations and operations of American social and political institutions and culture in the context of a diverse global community.*
4. *Critical thinking and problem solving skills in addressing a problem or situation described verbally, graphically, symbolically, or numerically.*

Defining and Assessing Critical Thinking

The assessment of student learning at Henry Ford Community College has been designed to emphasize faculty involvement and control. This reflects the belief that assessment will be more effective and provide more useful feedback to instructors if they are able to develop the methods and measures to be used. The assessment of learning, as well as other aspects of learner-centered education, represents a paradigm that can sometimes be perceived as intruding on faculty autonomy. Therefore, to increase support for the assessment process, HFCC has sought to minimize the degree to which assessment procedures come from the outside. Faculty will be more likely to participate in authentic assessment if they develop and control the methods used.

Henry Ford Community College has a long tradition of shared governance. The organizational model for assessment at HFCC reflects this tradition. Assessment leadership comes from the committee for the assessment of student learning (CASL), which consists of eighteen elected faculty members, representing all areas of the college, and ten appointed administrators. The committee is co-chaired by a faculty member, reassigned from 60 percent of his or her teaching load, and one vice president. The faculty co-chair has a highly visible role on campus and, together with a full-time coordinator for assessment, guides and supports the day-to-day operations of the assessment process. All assessment procedures are developed by the CASL and approved by the college senate. The college organization, made up predominantly of full-time faculty, approves the major components of the assessment plan.

The first stage of critical thinking assessment at HFCC began with the use of the College Assessment of Academic Proficiency (CAAP) test in 1998 in a selection of courses taken by students near graduation. However, in 1999, the college sought a broader approach and adopted a plan to assess critical thinking in randomly selected courses across the campus. In a policy statement approved by the college organization, it was agreed that critical thinking was being taught in all college-level courses, except those in which performance (such as certain music or physical education courses) was the primary outcome. As part of this agreement, the college began a process in which all courses were to have developed a set of measurable learning objectives, common to all sections of the course, that were to include *at least one critical thinking learning objective.* Over a two-year period, groups of faculty members across the college have met to achieve consensus on a set of core learning objectives for the courses they teach, which are then submitted for approval to an administrative council.

The HFCC Critical Thinking Assessment Plan

In order to assist in the achievement of critical thinking outcomes, a critical thinking subcommittee was created in fall 1999. A resident philosophy instructor who had extensive knowledge of and experience in teaching and assessing critical thinking became chair of this subcommittee. As a part of its charge, the subcommittee reported to the larger committee for the assessment of student learning on various critical thinking issues. Members of the subcommittee provided a thorough review of the related literature on standardized tests designed to measure critical thinking, forwarded numerous definitions of critical thinking, and created suggestions on how faculty would most effectively proceed in their classrooms with critical thinking assessment.

In January 2001 the subcommittee invited faculty to participate in a pilot program designed to measure critical thinking. Six groups volunteered to take part in the pilot program, with the intent that others might learn from their documented processes and experiences. Again, in early 2002, another set of faculty members was asked to complete pilot projects. By the end of the pilot program, four courses actually conducted studies and submitted assessment reports. They were: Biology 131, Introductory Biology; Philosophy 131, Introduction to Logic; Math 180, Calculus 1; and NSG 255, Nursing and Health Care Systems II.

According to our general education procedures, which serve as a planning document for the college assessment, critical thinking will be assessed in ten courses every year. This past January, the names of courses offering at least five sections were literally thrown into a fish bowl for random selection. The committee for assessment of student learning decided to choose one course from each of the ten divisions on campus. This way, the assessments would be evenly distributed throughout campus and would facilitate the involvement of faculty throughout various disciplines in assessment activities.

The general education procedures also outline the two-year assessment cycle for critical thinking and the activities that are to occur each year. These activities include the following.

Year One: Preparation and Initial Assessment

The participating faculty members should complete Steps 1 to 8 during the winter term so that the assessment measure could be administered during the subsequent fall semester. Assistance from CASL members will be available for all faculty members participating in the assessment process.

◇ **Year One—Winter Term**

1. If necessary, obtain council approval for the course master, thus ensuring that the division has already identified common critical thinking measurable objectives.
2. Create a working operational definition of critical thinking as it relates to the objective to be measured.
3. Collaborate with all instructors who will be teaching the course in order to develop a common assignment or test to measure critical thinking.
4. Consult with providers of instructional support services, if appropriate, in the development of the project.
5. If a written assignment is used, create an agreed-upon primary trait analysis (PTA) or rubric for evaluation of critical thinking.
6. Each participating faculty will identify the methods by which critical thinking skills are learned by the students in her or his classes.
7. Develop a preparation guide or supplementary materials, if appropriate, to facilitate successful student completion of the assessment.
8. Prior to incorporating it into classes, faculty members developing the assessment procedure will obtain division approval, if appropriate.

◇ **Year One—Fall Term**

9. Incorporate the assignment or test in all sections of the designated course.

Year Two: Closing the Loop, Second Assessment and Final Reporting

◇ **Year Two—Winter Term**

10. The critical thinking review teams will evaluate student work and will report assessment results and recommendations to the division/department and CASL. Based on assessment results, faculty members teaching the course will develop changes to improve the teaching or measurement of critical thinking, if necessary.

◇ **Year Two—Fall Term**

11. The assessment assignment or test will be administered again in all sections of the designated course. Again, the critical thinking review teams will evaluate the results and provide a final report to their division, the committee for the assessment of student learning, and the senate.

    As part of their interim report, due in winter of the second year, participating faculty members will be asked to record the following.

    1. What is the critical thinking objective you are attempting to measure? This should come directly from the course master, on file with the appropriate dean.
    2. Indicate your operational definition of critical thinking as it applies to the objective stated above.
    3. Describe the assignment or test you will administer to students.
    4. Identify how providers of support services were consulted or used in the development of this project.
    5. If a written assignment was used, provide a copy of and rationale for the primary traits analysis or rubric that was used.
    6. Identify the teaching methods used by each instructor to teach critical thinking.
    7. Identify any supplementary materials provided for students to guide them through the assignment.
    8. Describe the results of the evaluation of artifacts.
    9. Describe all improvements that will be implemented prior to the next assessment.

    A final report will be due at the end of the two-year cycle that will record any improvements in overall achievement on the critical thinking assessment.

Activities to Support Critical Thinking Assessment

Critical thinking is a phrase that has been used and defined in various ways. In some cases, it is understood to involve the evaluation of the thinking of others, as in the analysis of an argument (Cromwell, 1992). In other situations, the term connotes a metacognitive process, in which a person consciously evaluates information in order to reach a decision or solve a problem. For example, Norris and Ennis define critical thinking as "reasonable and reflective thinking that is focused on deciding what to believe or do" (1989, p. 1). In still other cases, critical thinking may simply be linked to higher order thinking skills, as might be found at the upper reaches of Bloom's taxonomy—analysis, synthesis, and evaluation.

Because of the emphasis on a faculty-driven model, HFCC has chosen not to adopt an official definition of critical thinking. Instead, a variety of definitions is made available to faculty members to consider as they develop their methods of teaching and measuring how students demonstrate critical thinking. However, to help instructors focus on similar approaches, the committee has recommended orienting assessment around four categories of critical thinking:

Analysis	To break up a whole into its parts, to identify the relationships among its parts
Evaluation	To distinguish between arguments, or solutions to a problem, that are strong and relevant and those that are weak or irrelevant to a particular question at issue
Inference	To draw a general conclusion by examining individual cases and discriminating among various sources of evidence
Problem solving	To examine aspects of a problem, identify its causes and consequences, and evaluate various solutions

These represent suggestions about how critical thinking may be defined, taught, and measured. While latitude is provided to faculty, there is also encouragement to pursue critical thinking in ways that are similar to the broadly recognized views about what it actually involves. Additional information and support about defining, teaching, and measuring critical thinking is provided for faculty in other ways.

- **Meetings and discussion groups.** After the random selection of courses for critical thinking assessment, the faculty co-chair of the CASL and the coordinator of assessment meet with each team of instructors to provide guidance and assistance. The teams are encouraged to meet regularly to reach consensus on how critical thinking would be defined and assessed in these courses.

  Discussion groups are set up for the teams of faculty members whose courses are selected. The purpose of these groups is to share across disciplines the ideas, challenges, and approaches the teams have encountered in developing their own approach to defining and measuring critical thinking and problem solving.

- **Workshops.** In collaboration with HFCC's Center for Teaching Excellence and Innovation (CTEI), workshops are offered on various aspects of critical thinking. One workshop focused on how to write measurable learning objectives for critical thinking and was aimed at faculty members who were developing their course learning objectives. Other workshops address different ways to define and measure critical thinking. These include discussions of multiple-choice tests, written assignments, scoring rubrics, and related topics.

- **CASL Web site.** Ensuring that information is easily accessible is important to assisting faculty. The committee for the assessment of student learning established a Web site that is used to distribute information about HFCC's assessment policies and procedures, how-to guidelines and assistance, forms, bibliographies, and links to many other Internet sites. One section is devoted specifically to critical thinking. As teams of faculty complete their reports about their own critical thinking and problem-solving projects, the reports are also posted on the Web site. Faculty members are directed to the site when questions arise about developing their assessment methods.

What We've Learned from the Process

The process to evaluate critical thinking at Henry Ford is still in the infancy stage, and we hope to identify and reward best practices throughout this evaluation process. Already, during the pilot programs, faculty worked closely with the CASL to determine and record these best practices. As a result of the first initial group of pilot assessments, the CASL decided to include a second year evaluation of artifacts in order to measure any real gains in learning. We anticipate that, as the project is fully implemented over the next two years, we will make further modifications to our assessment practices. If necessary, we will modify teaching strategies, testing instruments, and assessment methodology in order to ensure that our graduates are meeting critical thinking educational outcomes.

References

Cromwell, Lucy S. 1992. Assessing critical thinking. *New Directions for Community Colleges* 77.

Norris, S., and R. Ennis. 1989. *Evaluating critical thinking*. Pacific Grove, CA.: Critical Thinking Press and Software.

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Assessing Critical Thinking Across the Curriculum

Nanette Bagstad, Paul Batesel, Ronald Semmens, and Mark Skean

Since 1992 Mayville State University has been the recipient of three faculty development grants funded by the Bush Foundation of St. Paul, Minnesota. The grants were designed to improve student learning through faculty development and improvement of teaching. Throughout 1992–1995 faculty participated in campus-wide training in cooperative learning; many faculty members continue to use cooperative learning in their classrooms a decade later.

The Need for the Program

The members of the original cooperative learning governance committee spent approximately two and one-half years investigating the need to submit a planning grant to the Bush Foundation to study how students could develop skills that would ensure their success in the college classroom. The governance committee members also wanted to assure future employers that our graduates possess the requisite skills necessary to complete work-related tasks. Discussion among faculty in all academic divisions mirrored the same findings: many students who were being accepted to Mayville State University exhibited a diminished level of academic preparation. The Liberal Arts Division administered the Nelson-Denny Reading Test to all incoming freshmen and transferees. The results revealed that significant numbers of students scored at or below the fortieth percentile in reading.

Faculty concluded that the reading deficit could be attributed to a number of causes. Most of our students were educated in small, rural high schools with very limited course offerings. There was an influx of students who were first generation college students; many were from low-income families, and others had been certified as having disabilities.

The faculty concluded that an emphasis on developing and assessing critical thinking skills would benefit our student body. The governance committee members wrote and submitted a grant proposal to the Bush Foundation to create critical thinking activities to enhance basic skills in the areas of reading, writing, speaking, mathematical calculation, and computing. The three-year grant, entitled Critical Thinking and Assessment Across the Curriculum (CTAAC), was awarded for 1999–2002.

Critical Thinking Outcomes

What did we want students to know or be able to do in terms of critical thinking? Since our institutional assessment plan had a critical thinking component based on Bloom's taxonomy, we initially determined that we would use Bloom. However, our association with Richard Paul and the Center for Critical Thinking in Sonoma, California, led us to adopt the Elements of Thought as our outcomes. Our faculty continued to find Bloom's categories valuable for creating learning tasks; but the committee felt that the Elements—question, purpose, concepts, information, interpretation, assumption, point of view, and implications—would better prepare our students for both college work and the world of work.

Development of the Test

Since the primary concern of this group was faculty development, we saw assessment of students as a means of providing information about our success as faculty developers. We, therefore, wanted a test that would provide accurate information about student performance in meeting specific outcomes. We felt that the only way to obtain this information was to make our own test. Based on a model from the Center for Critical Thinking, our test consisted of a reading passage with directed prompts. We selected a short article on required summer school from the opinion page of *USA Today* as a topic that would be familiar to most of our students.

Development of a Scoring Rubric

Fifteen faculty members—roughly a third of our faculty—were involved in the test. A rubrics team of eight faculty members from five disciplines constructed the test and scoring rubric. Working with a draft of the test, this team went on a retreat in September. They

defined the task, took the test themselves, and began to try to determine baseline answers. Discussions were at times heated, but by the end of the first day, the team had arrived at a consensus about a reasonable student response. On the second day, the team read through a hypothetical set of answers, attempting to decide whether the answers met the baseline, exceeded it, or fell below it. Again, after heated discussion, the team decided that the baseline would be workable.

During the following May, the rubrics team met again, this time to extend the baseline to four levels. Again, the team applied the rubric to four actual student papers, making revisions they deemed necessary. The grading team arrived, saw the rubric for the first time, and tried to apply it to the same set of papers. Their results were in line with those of the rubrics team. The two teams met together to discuss problems. After more heated discussion, they revised the rubric again and applied it together to a final student paper.

Testing and Scoring Methodology

Freshman and sophomore students were tested during the fall 2000 semester, and those who remained were retested with the same instrument during the spring 2002 term. All papers were then retyped and scored by the grading team. This team had been trained to perform consistent scoring, and the method of assigning the papers to scorers also contributed to reliable results. Appropriate statistical analyses were performed to measure the improvement in each of the elements of critical thought across the group as a whole and for each individual student.

Results

A Table of Means, Standard Deviations (SD), t-Test Values, and Significance Levels for the Pre-test/Post-test Comparisons of the Eight Elements of Critical Thinking (n = 27)

Elements	Pre-test		Post-test		t Value	Sig.
	Mean	SD	Mean	SD		
1	2.39	.97	2.26	.75	.574	ns
2	2.02	.58	2.00	.84	.103	ns
3	2.80	.59	2.74	.70	.473	ns
4	2.41	.93	2.30	.74	.465	ns
5	1.98	.55	1.85	.55	1.000	ns
6	1.64	.66	1.54	.48	.796	ns
7	2.37	.64	2.13	.64	1.837	ns
8	1.41	.77	1.57	.81	.975	ns
Total	17.02	2.62	16.39	2.34	1.509	ns

The exam results provided no early indication of changes in students' critical thinking across any of the eight elements of thought.

External Evaluator Findings

The evaluator offered several possible explanations for the flat exam scores. First, implementation activities have yet to be institutionalized. Second, the implementations have, in most cases, consisted of only one to three lessons covering one to three days of individual courses. Third, the students who wrote the posttest constituted a minority of the original sample. Fourth, the level of exposure of the post-test students to the eight elements was not known.

The evaluator also offered the following recommendations.

- Continue the faculty development, faculty instruction, and student learning assessment practices that have been designed and implemented during these first three years.
- Expand the number of faculty members participating in CTAAC activities.

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- Increase the number of lessons during which an individual faculty member incorporates direct reference to and application of Socratic questioning and the elements of critical thought.
- Intensify student academic experiences with the elements of critical thinking at various meta-cognitive levels, with special emphasis initially on identification and recall, so that students can spontaneously name and think about the elements.
- Apply more control on the student participation variables of the pre-test/post-test assessments.

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Integrating Faculty Development and Outcomes Assessment

John Neibling, Alan Jacobs, and John Nagy

Over the past decade, significant progress has been made at hundreds of American community colleges in the area of identifying and assessing student learning outcomes. Untold hours of faculty and administrative effort have been applied to the effort to transform institutions from the teaching paradigm to the learning paradigm. There is almost certainly an outcomes committee on every campus, and there have even been positions created in order to meet the challenge. Accrediting agencies, such as the Higher Learning Commission, have provided high levels of support of and guidance to institutions as they have attempted to transform themselves. A classic example of such support and guidance is the "Levels of Implementation" document that the Higher Learning Commission developed for use by its client colleges, as well as the regional conferences it has sponsored. It would be difficult to overestimate the amount of time, energy, and money that has been spent on student learning outcomes assessment.

In spite of the monumental effort that has been made to get the paradigm to shift, most institutions still find themselves striving toward achieving the goal of becoming "learning colleges." One of the reasons that it is so difficult to effect change is that decades, if not centuries, of academic tradition, funding structures, governance systems, and even legislative mandates militate against it. Therefore, at many colleges, outcomes assessment is viewed as an add-on, rather than a changeover. Processes such as curriculum approval, faculty evaluation, and budgeting continue on as they have for years, even though the institution purports to be committed to outcomes assessment. The very existence of an outcomes committee could even be seen as evidence that outcomes assessment is not truly integrated into the college's processes.

While change is often a slow process in higher education, it can happen, especially when faculty members believe that a new idea can actually help them in their teaching, rather than being the *"idée de jour,"* as has so often been the case of late. Scottsdale Community College has had a professional development system in place for many years, but it was based on the enhancement of teaching, rather than the assessment of student learning outcomes. Through the leadership of the outcomes committee, the college is transforming its faculty enhancement plan (FEP) from an old-paradigm process into a dynamic assessment vehicle.

The FEP is the primary vehicle for instructional improvement at Scottsdale Community College. Every full-time faculty member is responsible for completing one on a regular basis. For probationary faculty (those in their first five years of teaching), it is an annual responsibility. For appointive faculty (those who have taught for more than five years), it is required every third year. At a college such as Scottsdale Community College, sixty to eight faculty members might complete FEPs annually, nearly half of the full-time faculty, depending on the number of recent hires. While the FEP is primarily a self-improvement tool for faculty, it lends itself very well to use as an outcomes assessment tool as well. In fact, one of the questions on the FEP specifically asks how the faculty member will use the information she or he obtains from the experience to improve her or his teaching—a goal of any meaningful assessment activity.

The FEP is particularly adaptable as a tool to conduct outcomes assessment at the course or program level. In order to encourage the use of the FEP for this purpose, the college has provided each full-time faculty member with an outcomes assessment guide, which includes four models for outcomes assessment that an individual teacher could conduct. The guide provides an explanation and an example of each of the four models: (1) the experimental and control group study, (2) the correlational study, (3) the plan-do-check-act approach, and (4) the benchmarking study. Having secured the assessment committee's support, the dean presented the idea at the next all-faculty meeting, held in January 2002. Although this information was disseminated in the middle of the academic year, and therefore the middle of the FEP cycle, thirty-five of the sixty-six faculty members who completed FEPs chose to use the process to conduct some sort of outcomes assessment. Through the FEP process, outcomes assessment was conducted at the course level in twenty disciplines taught at the college.

Two FEPs that blended the two purposes of instructional improvement and student learning outcome assessment were done in the subject areas of math and biology. In the case of math the faculty member used the experimental and control group model, and in biology the faculty member used the correlational model. In both cases, the faculty members made extensive use of statistical analysis in order to draw their conclusions and make their recommendations for instructional improvement. Also, in both cases, the outcomes assessment activities informed their understanding of the needs of their students and the adjustments that they and their teaching colleagues needed to make in order to improve the learning of students.

In the math example, students were divided into two groups. The first group, the control group, was made up of students who took conventional math courses in arithmetic review, elementary algebra, and intermediate algebra. The second group, the experimental group, was made up of students who took special sections of the same courses, but whose sections employed an instructional innovation called the Maricopa Mathematics Modules. The study compared the success of the two groups in terms of their final grades in the courses. In the study, throughput success was indicated by successful completion (a grade of A, B, or C) of a math course and its successor in two semesters. Throughput rate was calculated as the number of students taking the first course who successfully completed the course and its successor in two semesters, divided by the original number of students taking the first course. The finding of the study was that there was a 42 percent greater throughput rate for students in courses using the Maricopa Mathematics Modules than for those in the conventional courses. Even more impressively, module students in intermediate algebra completed intermediate algebra and college algebra at a rate 59 percent higher than conventional students.

In the biology example, the instructor studied predictors of success in two biology courses, general biology and human biology for allied health majors. The reason these courses were chosen for study was their pivotal place in the curriculum of students aspiring to careers in health services. General biology is foundational for students who are required to take courses such as microbiology and human anatomy and physiology, as well as many courses taught at the junior level at universities. Failure to learn and retain the information in general biology is a virtual guarantee of failure in subsequent courses. Mastery of information in human biology for allied health majors is an even more crucial issue in that it is the only general biology course required in programs such as nursing. Therefore, it is the only instruction such students will receive in areas such as cellular metabolism, patterns of inheritance, basic molecular genetics, ecology, and evolution. Whereas biology majors will have these topics reiterated in higher-level courses, allied health majors will not. Therefore, authentic learning in human biology for allied health students is even more essential than for actual biology majors.

In order to understand the learning environment in these courses, the instructor studied the correlations between various factors and student success. Such factors included the student's previous college-level science and mathematics training, reading ability, lab attendance, and high school attended, as well as the number of hours the student spent working at a job outside of the college. The instructor then performed a regression analysis on each of these factors and student success. Among the notable findings were that students with no previous college math or chemistry training have a significantly higher dropout rate in general biology. Somewhat surprisingly, the variables of "high school attended" and "working outside of class" did not yield significant results. There was a correlation between being able to understand the textbook and success, and there was a very significant correlation between attendance at labs and success in the class.

While such classroom research is commendable and impressive, it is still subject to the question "So what?" if its results are not applied to making improvements in instruction. Accordingly, a question on the FEP report asks instructors how they will integrate or apply what they have learned from the process into their classroom teaching. This question essentially closes the loop for the instructor and provides the college with specific suggestions about improving instruction. As faculty members work with department chairs in anticipating their participation in the FEP process, opportunities for instructional improvements at the course and program levels emerge. In both cases discussed herein, the information gathered and reported by each faculty member had the effect of improving instruction on the individual and department levels.

In the case of math, it became apparent that the use of the Maricopa Mathematics Modules represented a significant improvement in student learning. As a result, those faculty members who teach from the modules believe their theoretical position (as implemented in the modules) has been validated. They have also felt more confident in encouraging their colleagues to teach from the modules. While others in the department have been interested in the results of the assessment, they have remained cautious. Consistent with the belief that student learning outcomes assessment is an ongoing, ever-changing process, the college's math faculty members do not make the assumption that the Maricopa Mathematics Modules will always result in increased student success nor that they cannot be improved. As other members of the department enter into the FEP process in subsequent years, more studies can be conducted to determine if the improved learning persists.

In the case of biology, the instructor was able to make at least two suggestions to the department based upon the FEP. First, it was clear that students should be encouraged to take classes in college-level math and chemistry before attempting general biology. Second, once in the course, students need to be reminded of the essential nature of the laboratory experience. In addition, a collaboration has arisen within the biology department in which a group of faculty members teaching courses that require introductory biology as a prerequisite are employing a similar analysis of their courses to assess how well students perform based on their experience in the prerequisite course.

As colleges move toward the learning paradigm, it behooves them to reinvent existing processes rather than create new ones that compete for the time and attention of department chairs and faculty. The faculty enhancement plan at Scottsdale Community College is a process that preceded the emphasis on outcomes assessment, and in its earlier form tended to focus primary on teaching inputs such as lecture skills and other techniques appropriate to the teaching paradigm. The FEP process began at a time when it was assumed that the focus of instructional improvement should be on the teaching inputs, but it has been adapted to meet the challenge

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of creating a college where the emphasis is moving toward assessing student learning. Although it is only one of many processes at the college, its transformation represents a significant step in the process of change.

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Effective Performance-Based Evaluation of College Faculty

Earl Nicodemus

Background

The quality of any college program depends on the faculty members who deliver that program. Yet, institutions of higher education often do a poor job of evaluating the members of the faculty. Faculty evaluation is threatening to the faculty members, and the system used is often the result of the campus political process and is soft and cuddly rather than objective and thorough.

A good faculty evaluation system needs to be influenced by the purpose of the institution of higher education involved. For example, a technical school's evaluation system would give considerable weight to teaching, since the primary purpose of that institution is teaching. A research university would adopt a system that placed much of the emphasis on professional activity such as research, publication, and participation in the professional dialogue in the discipline. If the role of the undergraduate portion of that institution were more directed toward teaching, then the instrument used to evaluate the undergraduate faculty would be weighted in favor of the teaching area. A religious institution might have service as a large part of its mission. If so, then the area of service would be weighted accordingly.

In the mid-1990s, Ronald Zaccari came to West Liberty State College as its president. The institution had a long history of dysfunctional faculty evaluation systems. Dr. Zaccari recognized that the faculty evaluation system needed to be based on the teaching, professional activities, and service activities of faculty members and challenged the college to develop a system based on those three elements. Since the primary purpose of the college is undergraduate teaching, the faculty committee initially wanted to put almost all of the 100 points into the category of teaching. After much discussion and work, a system was developed that had 50 points allocated to the teaching category and 20 points allocated to each of the other two categories. The 10 remaining flex points could be allocated in any combination to either or both of the categories of professional activities and service. Because of the diversity of activities under each of these three areas among the departments on campus, each department was allowed to determine its performance factors for each of the three areas. Another feature of the process was a Faculty Performance Planning Document in which the faculty member attempted to predict his or her activities in the three areas and defined the allocation of the 10 flex points for the coming academic year. Although the superstructure of the faculty evaluation system provided by the college's policy was sound, it did not provide for objective research-based assessment in the three areas. To accomplish this, the chair of the department of professional education began a study of the research relating to evaluating college faculty. Research relating to evaluating college teaching was of special interest.

Evaluating Professional Activities and Service Activities of College Faculty

Evaluating teaching was so important because of the manner in which the other two categories were addressed. In discussing the areas of professional activities and service, the professional education faculty quickly began to list activities and to discuss the relative values of those activities. A number of questions were discussed: How much credit does a faculty member receive for a publication? Does an on-campus publication get any credit? Does publishing in a non-juried publication earn as many points as publishing in a juried publication? What about a chapter in a book? What about a whole book? How about a professional journal compared to the newsletter for the state professional organization or the regional professional organization? What about Web publishing? Is any credit given for maintaining the Web site? Is maintaining a Web site publication or service? How does one determine what constitutes professional activity and what constitutes service? For example, where does a faculty member in professional education get the credit for conducting a parenting skills workshop for the PTA? Another question that generated discussion was, Can one repeat activities and get additional points? How many times? Do I get more points if I go to another state or national conference? What if it is for a different organization? When does absence from class to attend conferences become an issue relating to teaching? If I am a state officer, do I also get points for attending the state meeting?

The end result of all of this discussion was the adoption of a list of prospective activities in the areas of professional activity and service, with a point value or point value range assigned to each item. At first glance, this checklist approach seems wrong. However, it required

the department to define the types of professional activities that it expected of the faculty and to determine the weight of the reward for participating in those activities. Until the list was adopted, the evaluators were required to rely on their professional opinions rather than the collective professional opinions of the faculty. In a research-oriented university, the faculty would want to develop very well-defined criteria for awarding merit points to each item in the category of professional activities.

Characteristics of Good College Teachers

Before college teaching can be evaluated, the characteristics that define excellence in college teaching must be identified. Ask anyone on our campus who is a good teacher and they will tell you. The same names will be mentioned regardless of who is asked. Ask who is a poor teacher, and you will find that students, other faculty members, custodians, and everyone else will identify the same people. Ask the students what makes a good college teacher, and they will tell you. Listen to them because they usually get it right. They will tell you that a good teacher is an expert in the subject that he or she is teaching and knows how to explain it so that they can understand it. They will tell you that a good college teacher treats them with respect. They will tell you that a good college teacher grades fairly. A good college teacher does not waste their time. He or she makes sure that the course content is what is expected for the course. For example, the content in an American history course should be American history. A good college teacher starts and stops class on time and uses time productively. A good college teacher is a good discussion leader and a good questioner. A good college teacher makes his or her expectations clear. A good college teacher will go the extra mile to help a student who needs it. Many students will tell you that they are offended when teachers use obscene language and tell off-color jokes. A good college teacher is available to the students. Students are quite upset when they visit a faculty member's office during office hours and find that the faculty member is never in the office. They also do not like to be stood-up by a faculty member with whom they have an appointment. Students will tell you that a good college teacher is well organized and returns assignments and exams to them promptly. A good college teacher uses visuals and other materials that are readable and make sense. A good college teacher knows how to make class interesting. A good college teacher follows the policies and procedures of the college or university and carries out his or her non-teaching responsibilities. A good college teacher works collaboratively with colleagues and others.

In addition to talking to the students, this researcher invested many hours in studying research and writings relating to the evaluating of college teaching and the definition of college teaching. No matter how well designed and elaborate the research study or how learned the author, the research always identified the same characteristics that the students at West Liberty identified.

Academic Freedom

Several of the items on the aforementioned list raise questions about academic freedom. Faculty members who teach in our accredited teacher education program do not have much real academic freedom. A better term might be academic latitude. The professional education program at West Liberty is a carefully planned sequence of courses and experiences designed around an array of local, state, and national professional standards. Each course in the sequence has a specific purpose and includes a well-defined portion of the knowledge base for a beginning teacher. The faculty member teaching the course is responsible for ensuring that his or her section of the course includes those items. The faculty members plan collaboratively to ensure that all sections of a given course include the same essential content. Field experiences and similar activities associated with a course are designed collaboratively so that the expectations are the same for all sections. Each faculty member has some professional latitude in regard to his or her teaching style, but must include the agreed-upon content and experiences. Thus, working collaboratively with colleagues is an important expectation of our faculty members.

Sources of Data

☐ **Student Evaluations**

A lot of controversy still surrounds the use of student evaluations of faculty. However, a large body of research supports the validity of student evaluations provided that the right questions are asked on the evaluation form. Rather than repeat a well-researched argument here, I refer the reader to a couple of good sources of information on the subject: University of Massachusetts Amherst *Assessment Bulletin*, October 1995 <http://www.umass.edu/oapa/assessment/ANewDesignforUMass.pdf> and "What Do They Know Anyway?" Richard M. Felder, Professor of Chemical Engineering, North Carolina State University <http://www.iub.edu/~teaching/felder.html>. Professor Felder's paper includes a large number of references to documents pertaining to student evaluations.

The questions presented on student evaluations need to be about things that a student should be able to rate. Examples include "The instructor appeared to know his or her subject"; "The instructor made good use of class time"; and "The professor treated the students with respect."

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If the student evaluation form includes questions relating to the course rather than to the instructor, those questions should not be used in evaluating the instructor. An example of such a question is "Did you think this was a worthwhile course?" If the student evaluation form is properly constructed, the faculty member can be provided with an average rating and can be informed of how his or her average rating compares to the average ratings of other instructors for the same course or of all of the instructors of the course.

In addition to the rating list, most evaluation forms include a space for students to write comments. The student comments are a useful source of data relating to the quality of the teaching. Any comments relating to the course rather than to the instructor cannot be used to evaluate the instructor. An example of such a comment is "SPED 440 should not be required for special education minors because we have already had all of that stuff" (an actual student comment!). After removing all comments that do not relate to the instructor's teaching, the remaining comments can be rated as negative, neutral, or positive. Then, one can determine the percentage of negative, neutral, and positive comments by simply counting them. One must emphasize that student evaluations are only one source of data. Although the research supports their use, an evaluation system that relies only on student evaluation data is flawed.

☐ **Peer Reviews**

Peer reviews provide another useful source of data. However, peer reviews are difficult to carry out in an objective manner in small institutions. The results tend to be inflated most of the time, with notable exceptions when the peer reviewer has a personal dislike for the faculty member. Our institution has used peer reviews in the past, but does not do so today for these reasons.

☐ **Class Visits**

Class visits by administrators or peers are useful if they are well structured. We use a form that allows the visitor to record what is taking place in the class every five minutes. It is in the form of a matrix, with the time across the top and a list of possible activities down the left side. It also includes a section that allows the observer to record the number and types of questions asked. Another line asks the observer to rate the activity in regard to teaching critical thinking. The observer also rates the appropriateness of the content, the level of student involvement, and the interest level during every five-minute interval. The bottom of the form has space for comments. At the conclusion of the observation, the observer prepares a report to the instructor. Class visits tend to be quite positive and usually provide data that is complimentary to the faculty member.

☐ **Peer Comments and Complaints**

As a department chair, I receive both complaints and positive comments from faculty members about each other. These must be considered holistically. In a small college, petty feuds and quarrels sometimes create negative relationships. As the combatants carry out their little wars against each other, they like to file complaints or to register criticisms of each other. Sometimes, they will try to enlist recruits from among the faculty to support their side of the quarrel. I think every campus has these little wars. One must examine every cannonball that is fired. Sometimes they are on target, and sometimes they are just so much noise. However, a pattern of complaints by a cross-section of faculty members pointing to a specific problem in the performance of a faculty member is another matter. To be used in the evaluation process, specific evidence must be provided. A faculty member cannot be negatively rated on an evaluation just because another faculty member doesn't like him or her.

☐ **Comments and Complaints By Students, Parents, and Others**

In our department, complaints from students, parents, and others are evaluated, and those that may have merit or that may need further action are recorded, placed into the file, and reported to the faculty member. As with comments and complaints from peers, most individual complaints are not used as evaluation data. However, a pattern of complaints about the same problem is used. Any individual complaint involving serious misconduct by a faculty member would be reported to the appropriate institutional authorities for investigation. Most comments that are made by students, parents, community members, and others are positive. Negative comments usually relate to grading or to respect for the students.

☐ **Review of Course Materials**

A review of the materials used in the course provides data relating to the appropriateness of the content, the fairness of the grading system, critical thinking, and other matters.

☐ **Records of Absences and Tardiness**

Faculty members miss classes for a variety of good reasons. However, a pattern of poor class attendance or of tardiness is unprofessional and should be reflected in the evaluation of the teaching.

☐ **Course Enrollment Data**

This is controversial. Should low enrollment reflect negatively on a faculty member's evaluation if other sections of the same course have much higher enrollments? A few years ago, in one of the departments on our campus, students nearly all dropped

a course by a faculty member before the end of the term because they felt his grading was unreasonable. Other sections of the same course were full to the limit. There was considerable resentment among his peers because they had full classes while he was teaching to two or three students.

☐ **Grading Patterns**

Should the grading pattern of a faculty member be a factor in evaluating his or her teaching? One former faculty member gave every student in every class an A. Another almost never gives an A. Is a grading system fair if the students who do not do the work get the same grade as those who do? An abnormal grading pattern may indicate a flawed grading system. In reviewing grading data, one should consider the nature of the course, because some upper-level courses have very high levels of student achievement that are reflected in the grades.

General Comments

Our department has adopted a rubric that lists the items mentioned in this document and provides descriptors and point values for them. By breaking the teaching category down into small elements and then evaluating each element, a more objective evaluation is possible. An evaluator must learn to set aside his or her personal feelings and to rate the faculty member fairly on each component. An excellent faculty evaluation system is possible if we clearly define what we want the faculty member to do and then design a rubric to measure whether it was done.

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Data-Driven Decision Making: A Case Study in Teacher Preparation

Nancy Blackford and Kate Wiles

Using assessment initiatives in education at Walsh University as a model, this study explores the means of balancing data-driven program review, new content standards, and state licensure requirements while preparing teaching professionals. It helps readers to

- Understand the contexts that propel data-driven decision making, particularly in teacher preparation
- Ask critical questions related to institutional and program assessment
- Involve an increased number of stakeholders in the assessment process
- Design a data management system suited to their unique needs
- Use data to inform instruction and program improvements and to demonstrate quality

The Story of Education Accreditation at Walsh

Walsh University is an independent, coeducational, Catholic, liberal arts and sciences institution located in northeastern Ohio. This Masters I university enrolls about 1,800 (headcount) and offers forty-seven undergraduate majors and four graduate programs. More than 400 undergraduate and graduate students pursue teacher preparation within the Division of Education—about one-third of Walsh's full-time population. The university is appraised by associations such as the Higher Learning Commission and the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Recently, the Ohio Department of Education revised its requirements for all teacher education units in the state. Each professional education program must now meet the 2000 National Council for Accreditation of Teacher Education (NCATE) criteria, thereby intensifying requirements that the division collect, aggregate, analyze, and apply empirical data so as to inform program improvements, provide systematic feedback to students, and monitor candidate progress toward initial teaching licensure. Walsh University was the first teacher preparation institution in the state to achieve five-year approval according to these criteria.

The Ohio Department of Education (ODE) granted this approval, in part, because ODE representatives said the assessment plan exceeded their expectations and those of NCATE. Two documents from the division, the conceptual framework and the assessment plan, are now being widely examined as models around the state and even in neighboring states; and faculty from the Division of Education have been invited to help train other institutions about the newly revised standards.

The conceptual framework developed by the Division of Education articulates three fundamental commitments: to diversity, to Judeo-Christian traditions, and to service learning. These guiding principles link the work of university faculty, pre-service teachers, and in-service educators who collectively form the "Connected Community" of the unit's logo. During the recent accreditation process, this aspect of the unit's framework was specifically commended. Additional stakeholders contributing to the successful implementation of this data-driven model include administration, faculty in other subject area divisions, the Consultative Council (a group of present and past educators from area schools), and informational technology personnel.

The Master Plan of Assessment of the Division of Education requires both internal and external data collection at *five points* in a candidate's progress toward initial licensure:

Point A:	Admission to the university
Point B:	Admission to the teacher preparation program
Point C:	Completion of the pre-clinical coursework
Point D:	Degree and licensure completion
Point E:	Entry employment year(s)

According to the state, the initial assessment plan submitted with the self-study was deficient. In the rebuttal that Walsh had opportunity to prepare during the thirty days after the team's visit, the division transformed the initial sketch into many flow charts on legal-size paper. The board still considered the plan insufficient and planned to award two-year approval—otherwise described as

at-risk status. With one-third of the undergraduate enrollment in education at stake, the university's president instructed his staff to request a hearing with the ODE Commission, which resulted in an invitation to the university to submit a third version of its assessment plan. With able assistance from a technical adviser assigned by the state, the division added narrative, more-complete charts, and more-readable tables. This seventy-six-page version brought five-year approval along with commendations as an exemplary plan. This case study outlines the collaborative, developmental process that produced the data-driven paradigm now guiding assessment and decision making during the pilot year of implementation.

Intellectual and Cultural Contexts

To understand such intense scrutiny of divisions of education as one manifestation of ongoing national quality initiatives, this written portion of the study briefly examines cultural contexts fueling demands for outcomes-based measures of teacher preparation programs. The "discovery" of the New World in the early Renaissance and the founding of the United States in the Age of Enlightenment endowed American culture with enduring faith in reason and mechanical principles. The Industrial Revolution advanced mechanistic thinking, even while it was counterbalanced by the Romantic and Darwinian movements in the nineteenth century. The development of the American educational system reflects this heritage—the belief in the individual's ability to reason and in the civic necessity of training the masses. Cultural influences of the twentieth century deepened and broadened this heritage. Normal schools were born at the time of Dewey's emphasis on pragmatism, Henry Ford's division of work into simple and discrete repetitions to be learned by the masses, cadres of efficiency engineers who followed Deming, and the deeply rooted tradition of logical positivists, rational idealists, and behaviorists. Such forces focused twentieth-century American education on the linear and the hierarchical.

The culture wars of the later twentieth century saw cumulative challenges to these principles: Einstein's concept of relativity and the demise of Newtonian physics, tides of philosophic and literary theory from Europe, waves of cognitive research, the sexual revolution, the Vietnam War, the shrinking of the globe, and the changing color of America's and the world's body politic. Education changed. The Montessori movement, the drive for relevance in the curriculum, the open classroom, altered dress codes, the growth of special education, multiculturalism in textbooks, bilingual education, and the integration of extracurricular activities were some of the changes.

The changes provoked resistance. Works by Bloom (*Closing of the American Mind*), Hirsch (*Cultural Literacy*), Bennett (*To Reclaim a Legacy*), and Sizer (*Horace's Compromise*) fanned state and local debate about the state of American schools. In the 1980s and 1990s, corporations seemed to be models for correcting the permissive "relevance" of the 1960s and 1970s and for restructuring to achieve lean management. Bit by bit, basic, solid knowledge of the past was made a bulwark against revisionism and theory. Many took comfort in learning that continued to be "a predictable, mechanical process measurable by observable responses, which led teacher education to focus on lessons and lesson planning that required bits and pieces of skills...based on assumptions of the linearity of learning" (Blackwell, p. 363). The people, the state, and the nation would know whether schools were doing the job. Teachers would be tested; students would be tested; programs would be measured. Accordingly, approval and funding would follow, or not.

In the context of ongoing debate, the demand for accountability in education—actual performance-based results—gained voice and credibility. Broad recognition of Alverno College's competency-based curriculum, the great success of Angelo and Cross's guide to *Classroom Assessment Techniques* (1993), and changing criteria mandated by accrediting bodies such as the Higher Learning Commission showed a national consensus calling for assessment plans and aggregated data as measures of good practice. The transformative power of assessment began to emerge. As of 1995 all Higher Learning Commission institutions were required to have a comprehensive assessment plan in place. Ongoing reviews now require analysis of patterns of evidence supporting the program's continuation and growth.

As data-driven decision making spread throughout state, regional, and national contexts, Ohio became a particularly interesting study in itself. While weathering a decade of litigation on vouchers and the constitutionality of funding schools via property taxes in the 1990s, the Ohio Department of Education responded to Title II of the Higher Education Act for approving licensure and teacher preparation programs by becoming one of the first in the country to adopt NCATE standards in 1998. In 2002 Ohio was one of thirty-two states with standards in place or in process; the other eighteen states had not yet set standards. Against this broad backdrop, this case study demonstrates how one model assessment plan—deemed satisfactory by the Ohio Department of Education and embraced by the division—now grounds the unit's decision making in fundamental commitment to gathering, aggregating, and analyzing data in order to discover patterns, decipher strengths and weaknesses, and make appropriate changes based on evidence.

Critical Questions for All Education Divisions

Question One:	What are the standards by which the division will be measured?
Question Two:	Since the measures must be holistic, field-based, and performance-based, how does a unit authentically measure itself against those standards? How does a unit do this with validity?
Question Three:	How can the unit manage thousands of data bytes and glean meaningful information?
Question Four:	How can the unit apply the data to inform decision making, to make genuine improvements, and to demonstrate quality?

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These basic questions are not simple. As an Ohio institution Walsh must meet *ten categories* of professional performance described by the Interstate New Teacher Assessment and Support Consortium (INTASC) Standards. These aspects of candidate performance are classified according to subject matter, student learning, diverse learners, instructional strategies, learning environment, communication, planning instruction, assessment, reflection/professional development, and collaborations, ethics, and relationships. Additionally, the Walsh assessment plan must confirm that the candidate has mastered essential elements of professional practice as defined by the Praxis/Pathwise model. The *four domains* of this model constitute evaluative criteria that state assessors will use during the candidate's first years of teaching. Thus, the preparatory program must also measure each pre-service teacher's performance against the standards.

Finally, the assessment plan generates data to attest to the candidate's successful performance in terms of university and Division of Education standards. Academic achievement and comprehensive studies in general education are required of all program completers. Further, the division's conceptual framework requires of its programs, faculty, and students commitments to diversity, service learning, and Judeo-Christian traditions. Thus, the assessment plan must provide evidence related to these *three essential attributes* of candidate performance as well.

Utilizing three sets of standards (NCATE, Praxis/Pathwise, and the Walsh conceptual framework), the master plan of assessment specifies sources, timelines, instrumentation, and evaluative criteria for collecting data. It also outlines feedback loops for individual pre-service teachers, the division, and the university at large.

While the fundamental process of data gathering and aggregation may suggest a mechanical series of checklists, the complex standards for measuring students, teachers, and programs are informed by current theory. Holm and Horn (2003) have cross-compared the standards of NCATE, INTASC, and the National Board for Professional Teaching Standards (NBPTS). They summarize these standards as

- Knowledge and skills that will help [teachers] know and understand who their students are and how they learn
- Knowledge and understanding of the content of the disciplines and of the instructional strategies that can be used to create powerful learning experiences
- An understanding of the role of assessment and how to design assessments that will inform practice and guide student learning
- Habits of reflection
- A collaborative approach to their work with colleagues, families, and communities (Holm & Horn, 2003, p. 377)

These criteria require relational learning communities in which discovery and experiment can occur. They imply incremental growth that is dynamic and cumulative. Data are gathered to verify growth and to benchmark the achievement of standards, but the larger target is holistic efficacy of the individual teacher and student and of the program, university, or community in which they function. The goals of the Division of Education's assessment plan at Walsh University are both to meet the accrediting bodies' need for evidence and to make evidence-based, data-driven decisions that genuinely inform best practice.

Stakeholders' Commitment

Throughout the accreditation and assessment efforts, the division adopted a team-driven process to create its conceptual framework and the assessment plan. No person on staff was specially trained in assessment; the state of Ohio was not able to offer models of either required document. While the university as a whole was deemed to be at Level 2 during its 1999–2000 comprehensive review by the Higher Learning Commission—a review that set the timing of the next comprehensive review in ten years—Walsh has never been a member of NCATE. Moreover, during the very months the division was drafting its framework and self-study, state department personnel were themselves coming to an understanding of the criteria and were defining processes for reviewing schools. The conceptual framework has gone through one post-review revision to date; the assessment plan has gone through eight substantive revisions.

Several factors contributed mightily to stimulating and maintaining the team effort. The divisional chair played a major role. The chair changed in July 2001; Walsh was reviewed in October 2001. But both the outgoing and the incoming chairs modeled constructive attitudes, keeping morale and commitment very high. Administrative support was strong—with some new personnel hires, with refurbishing of the facilities, with editorial assistance, and with stipends for writers. The faculty shared the load, meeting once a week for one crisp hour and monitoring themselves for productivity—in part, through the unit's stellar minutes. All individual full-time faculty reviewed each draft of the plan and gave feedback. Cooperating teachers were involved through special preparatory meetings and an open forum on the assessment plan. The Consultative Council was revitalized with meaningful responsibilities and authority;

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community partners therefore were willing to give useful feedback on the plan. The ODE technical assistant was regularly available by e-mail, by phone, and in person. These collaborators helped guide the division's deliberations. The president's support in the end was the absolute bedrock, for he insisted that the mission and welfare of the institution required petitioning the state to reconsider the assessment plan.

Without the active, direct involvement of all these stakeholders throughout the process, the worth of the assessment initiative would have been seriously compromised. Like most small institutions, Walsh does not have time, finances, or personnel to engage in assessment for its own sake. To justify the sacrifices entailed in the assessment plan, results had to be comprehensible, credible, and valid—particularly to those directly affected. Stakeholders had to feel empowered to assist in designing, revising, implementing, and utilizing the plan. This was possible only by including stakeholders at every point in the developmental process. Students themselves gave feedback to rubrics during the pilot year's first semester through the Education Club, the education honorary, and individual classes.

Data Management Design

Using the adopted standards of professional practice (as defined by INTASC, Praxis/Pathwise, and the conceptual framework) to identify *what* was to be measured, the assessment team was now ready to confront the practical issues. How? How often? By whom? What data bits were worth using? How might the unit glean, store, aggregate, and interpret these byte sets? Assessment options were limited by physical storage space, technological capacity, and the challenges of having part-time team members working on this burgeoning project. The limits were fortuitous in prompting use of some data already regularly produced and available.

For the first assessment "gate," the admission to the university (Point A), it was readily evident that records kept by the Admissions Office and Information Technology department included instructive data elements: high school GPA, SAT/ACT scores, placement tests in English and math, and the California Critical Thinking Skills Test.

Defining Point B (admission to the teacher preparation program) data elements was more challenging. What instruments would produce data relevant to each of the ten INTASC standards? The division met to identify assignments or activities in four required introductory education courses that specifically addressed these standards. To demonstrate proficiency, each pre-service teacher (regardless of licensure track) would satisfactorily complete at least two performance-based activities per standard. While most instructors were already using rubrics to score these assignments, the next challenge was standardizing the assessment instruments across multiple sections of the same course, among various instructors, and between courses. This required appreciable staff development and collaboration.

Once the exponential size of available data was fully grasped, the next key decision was to focus on specific data elements in the rubrics correlating precisely with an INTASC standard or Praxis/Pathwise domain. The three core components of the conceptual framework (Judeo-Christian traditions, diversity, and service learning) also required similar identification of assessment focal points. The developmental portfolio was chosen to measure in a formative way the candidate's fulfillment of each standard at intersection of Points B and C.

As with Point B, discrete data focal points were identified for Point C (completion of pre-clinical coursework), this time using upper-level education courses to confirm that *all* defined best practices (according to INTASC, Praxis/Pathwise, and the unit's conceptual framework) were systematically assessed during each candidate's program of studies. As a result, through Points B and C, candidate performance on each of the ten INTASC standards is assessed at least four times prior to the student teaching semester. Additionally, discrete data are now available for all elements of the Praxis/Pathwise model and the core components of the conceptual framework. The professional portfolio documents in a summative way the candidate's fulfillment of all criteria, as measured at the intersection of Points D and E. Point D (program completion) data points are now beginning to accrue—most significantly, Praxis II scores. Praxis II tests are nationally normed tests required by the division and by ODE in licensure areas and on principles of learning and teaching. Point E data will begin to accrue in fall 2003 as candidates take their first teaching jobs.

In summary, major components of the assessment plan are admission data; performance in the years prior to student teaching on core components of four courses common to varied tracks, as measured on rubrics adopted throughout the division and assembled in a developmental portfolio; performance in the student teaching terms, as measured through division-wide rubrics and assembled in a professional portfolio that is evaluated by internal and external assessors; performance on varied national Praxis tests; and performance as a practicing professional. The division has identified particular rubrics, tests, and measures as key performance indicators (KPI's) that will be aggregated and analyzed at least annually as a means of deciphering trends, gaps, and strengths that might then be continuously improved.

In this pilot year, many aspects of the assessment design are still being modified. But already, the students, faculty, and teacher preparation program itself are benefiting from both the developmental process and the evidence generated thus far.

Evidence and Quality Indicators

The unit has evidence of maintaining systematic and coherent focus on articulated objectives. The evidence is the standardized rubrics, whose development prompted much discussion about course objectives, about new ways for some instructors to deliver their courses, and with adjuncts about the division's goals and means of measuring success. On matrices recording data from rubrics, the unit is just beginning to aggregate. Despite some anomalies, there is, on the whole, respectable consistency among means and medians in the data gathered for Points A, B, and C. Points D and E data are pending, as of this writing.

One example of the data collection, aggregation, and analysis underway focuses on the INTASC standard of communication. At Point A, verbal scores from ACT/SAT tests for declared education majors are compared against overall entering class scores. Additionally, the performance-based writing assessment administered by the English department to entering freshmen provides comparative data. At Points B and C, education students' developmental portfolios now include elements focused specifically on oral and written communication skills. The unit's comprehensive matrix of these data elements allows analysis by student record (throughout the candidate's preparation program; by standard (in this case, communication as discretely evaluated in eight separate assessment opportunities); by course; by section; and by specific assignment or activity. The essential professional skill area of communication is further assessed at program completion (Point D) through the development and submission of a professional portfolio. During the successful candidate's early employment years, assessors from the Ohio Department of Education will use the Praxis III instrument to evaluate the new teacher's communication skills throughout the four domains of professional practice. These data will be forwarded to Walsh University and the Division of Education for further analysis and as evidence of program efficacy in all areas assessed.

A second example of the unit's approach to data collection and analysis addresses attention to student diversity, which is identified by INTASC, Praxis/Pathwise, and the unit's conceptual framework as critical to successful teaching. Beginning with the student's admission to the teacher preparation program and through the completion of the developmental portfolio, each candidate must cite evidence of varied field experiences in terms of student age; identified special needs; and school type (rural, urban, suburban, parochial). Additionally, through required assignments of varying sorts, each candidate must demonstrate sensitivity to diversity issues and ability to modify instructional practice for optimal accommodation. Each activity provides a data collection point, confirming explicit attention to diversity and measuring the quality of candidate performance. In addition to informing students about the importance of diversity in professional preparation, initial findings have already affected the unit. While initial pilot data were readily available concerning students with disabilities, other aspects of diversity (e.g., multiculturalism, socioeconomic status, language) rarely surfaced. The division has already modified course requirements accordingly. Thus, attention to diversity is now being documented within university course requirements, required field experience activities, and the summative portfolio. At each point, the assessment plan defines precise data to be collected, aggregated, and analyzed.

The unit anticipates continuing to meet regularly and staging workshops for both full-time and part-time faculty to ensure consensus in interpreting standards, protocols, and findings. A mentoring group instituted in spring 2003 will specifically address the needs of adjunct faculty in this data-driven model. Other activities are planned to sustain the involvement of multiple stakeholders in the process. For instance, to produce data attesting to inter-rater reliability, each developmental portfolio submitted by a pre-student teaching candidate was assessed both by the unit instructor and by a member of the Consultative Council. Such initiatives demonstrate the Division of Education's commitment to using data to inform professional practice. Adjustments will continue as this systematic process reaches full implementation, thereby demonstrating that all program completers model best practices.

Future Implications

Walsh's successful example of reaccreditation within shifting standards has relevance for the constituencies of the Higher Learning Commission. Colleges continue to struggle with finding alternatives to NCATE (e.g., TEAC, Teacher Education Accreditation Council); they wrestle with increasing emphasis on accountability in education (e.g., the national Title II Report Card). State departments of education realign their processes and benchmarks, and accrediting bodies under heavy scrutiny periodically reexamine their role and expectations—regional accreditation out of Chicago now offers institutions the Academic Quality Improvement Project option.

National scrutiny of teacher preparation continues to undergo profound change. The 2001 No Child Left Behind Act and, directly on its heels in Ohio, Senate Bill 1 both place axiomatic emphasis on testing and on data-driven decision making. Ohio is now one of only five states with accountability plans that comply with the federal No Child Left Behind Act. Within such a context, one small private university in a rust belt state has so far successfully navigated reaccreditation in this dynamic era.

References

Angelo, Thomas A., and K. Patricia Cross. 1993. *Classroom assessment techniques: A handbook for college teachers 2nd ed.* San Francisco: Jossey-Bass.

Blackwell, Peggy J., Mary H. Futrell, and David G. Imig. 2003. Burnt water paradoxes of schools of education. *Phi Delta Kappan*, 84(5): 356–361.

Holm, Lisa, and Carol Horn. 2003. Bridging the gap between schools of education and the needs of 21st-century teachers. *Phi Delta Kappan* 84(5): 376–380.

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Capitalizing on Internal Talent: A Model for Professional Development

Alex Birkholz and Renelle Gill

Introduction

As financial realities hinder the ability to provide quality staff development, the solution may come from within. Wisconsin Indianhead Technical College (WITC) is a postsecondary institution located in northwest Wisconsin. WITC is a member college of the Wisconsin Technical College System. With a designated geographic service area of 10,000 square miles, WITC operates in an area larger than nine of the United States. The eleven-county technical college district is served through four comprehensive campuses in the cities of Ashland, New Richmond, Rice Lake, and Superior. Additional staff members work at branches and learning centers, and in the administrative offices in Shell Lake.

WITC had a history of providing extensive staff development through the use of outside experts. Over time, the direct costs as well as the logistics of serving staff at multiple locations caused the college to investigate this practice. The very geography of the district presents an unusual challenge in providing staff development. Employees may have to drive more than three hours to participate in an activity offered at a college location other than their own.

WITC offers associate degrees, technical diplomas, and continuing education courses for those seeking new employment or broadening their skills in an existing job. Instruction focuses on the areas of agriculture, business and marketing, emergency services and health, general education, industrial technology, and personal and community service. The faculty and staff supporting this wide variety of educational programming possess a tremendous amount of talent. In addition, years of train-the-trainer type seminars from outside clinicians had prepared internal staff to deliver staff development in many areas. There was a large pool of resources right within our institution.

The Learning Academy Becomes a Reality

The Learning Academy was developed as a model to provide professional development opportunities to promote, develop, and expand the quality education and services of WITC. From humble beginnings in 1999, the Learning Academy has expanded to utilize and enhance the talents of staff at all levels of the organization. Success has been measured through participation rates and participant assessment of their experiences. A large part of the impetus for the Learning Academy comes from a movement toward continuous skill enhancement for all staff. Everyone is a teacher and a learner. The Learning Academy helps this vision come to fruition. WITC has embraced a learning college model, and the Learning Academy is a natural outflow from that model.

The WITC Learning Academy

The Learning Academy provides professional development opportunities to promote, develop, and expand quality education and services of the Wisconsin Indianhead Technical College. It exists to encourage the success and achievement of WITC students, faculty, and staff. This specifically includes development of custodial, office and technical support, faculty, and management with specific learning outcomes designed for each group.

The following is an example of the learning outcomes for the faculty group. The Learning Academy strives to provide opportunities for faculty to develop into individuals who

- Are active, lifelong learners who will assume a confident, effective, and responsible role in the world of work
- Assess their own learning and progress toward established goals and outcomes in personal and professional life
- Make decisions using critical thinking and problem-solving skills

- Apply social interaction skills to develop productive, respectful relationships
- Effectively communicate information in personal and group settings
- Demonstrate proficiency in areas of responsibility
- Demonstrate proficiency in the planning and strategic implementation of authentic learning experiences that meet the needs of diverse learners and promote critical thinking and creativity
- Demonstrate proficiency in documenting and assessing student learning

The development offerings of the Learning Academy must work toward the desired outcomes of the employee groups. Recent offerings include development opportunities in

- Academic advising
- Online course server software
- Licensure and certification
- Instructional television training
- Software packages
- Performance-based instruction
- Web site design
- Facilitating the future (instructional design, methodology, assessment, and organizational transformation)
- Learning pathways (instructional design, delivery, and assessment)

The Logistics

All offerings of the Learning Academy are coordinated through a professional development specialist. This position serves to provide logistics, strategic planning, needs and outcome assessment, and communication of all Learning Academy activities. The position coordinates communication of the Learning Academy facilitators. These facilitators guide participants through the staff development activities. Facilitator meetings are used to discuss successes, improvement strategies, and the expansion of offerings.

The Learning Facilitators come from the WITC staff. Members possessing talents in areas supporting staff learning outcomes are invited to propose development opportunities. Staff members then facilitate learning for their co-workers and serve as mentors. Through this process, existing expertise is honored, and those wishing to expand their abilities are encouraged to take on a facilitator role.

Upon receipt of the Learning Academy course catalog, WITC staff members register through the office of the professional development specialist. The development opportunities utilize the Internet, face-to-face meetings, instructional television, team teaching, and various other methods to deliver learning opportunities.

Profile: Learning Pathways

Learning pathways is a major offering of the WITC Learning Academy, and more than 160 faculty members and managers have participated in this four-weekend development opportunity. Learning pathways prepares participants to apply the principles of accelerative learning to the classroom. The concept of preparing a positive learning environment through the use of music, peripherals, manipulatives, and suggestology is explored. The principles of brain-based learning, constructivism, multiple intelligences, assessment, and learning styles are incorporated and applied in the learning process.

Profile: Facilitating the Future

Facilitating the future reflects the need for changes in educational practices that foster administrators', teachers', and students' abilities to think critically. More than 900 pre-K–16 faculty members and managers have participated. Daily learning includes a series

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of experience-based activities. Experiences allow active inquiry into living and learning to increase learners' resources while promoting the growth of the learning community. This offering is a partnership between WITC and two Wisconsin cooperative education service agencies.

This project, beginning its fourteenth year, is designed to be a continuous, long-term staff development experience. The program includes a two-week summer learning community experience with options to continue that learning throughout the academic year. Each community is designed to create synergy between the participants. Typical learning community themes include critical thinking, designing learner-centered classrooms, assessing student learning, and cultivating creativity.

Conclusion

The WITC Learning Academy has provided a framework through which to offer staff development. In addition, the academy has provided opportunities for staff members to share their existing talents and learn new skills. This method of capitalizing on internal talent is in keeping with the philosophy that everyone in the organization is both a teacher and a learner.

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Developing the Capacity for Synthesis: Demanding and Assessing for High-Level Learning

Carol Canavan

Overview

As college faculty we have received little in the way of systematic development in the areas of designing courses based on high order learning objectives for students. Even less assistance has been available in developing effective assessment strategies. Consequently, we have been accused of "testing what is easy, rather than testing what is important" (Grant Wiggins, personal communication, 1997). College teaching and learning should provide opportunities for students to synthesize components of a course or curriculum into new understandings and perspectives. Nevertheless, examples of learning activities that demand little more than memorization and analysis are plentiful. Are there ways to ensure that we are designing courses that will demand this high cognitive level of achievement, and are there tools to help us in our assessment of synthesis? Previous research (Canavan, 2001) explored these topics through the examination of senior-level interdisciplinary courses (referred to as Tier III) at Ohio University. To assess student products I used the work of Biggs and Collis (1982). Their tool for studying student products is called the Structure of the Observed Learning Outcome, or SOLO. An apparent extension of that system, called the Conceptual/Integrative Coding System, was developed by Suedfeld, Tetlock, and Streufert (1992). These tools provided assistance in analyzing student products to determine whether students had, in fact, gone beyond mere reporting to develop synthetic insights. The research also provided additional support for Walvoord and Anderson's (1998) system of developing clearly defined rubrics for guiding and evaluating student work.

A Common Definition for Assessment

As described by the American Association for Higher Education, assessment is

> an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance (Angelo, 1995, p. 7).

This definition suggests that faculty must understand and specify what they expect from their students. Further, it suggests that they describe in their syllabi and assignments what is expected in a manner that undergraduate students can effectively interpret and address. Finally, the definition assumes that faculty can assess their own and their students' work to make judgments about improvements in future iterations of the course.

The AAHE definition suggests the need to align the parts of the curriculum as Ewell (1997) described it in order for the maximum learning experience to be achieved. Consequently, in my research (Canavan, 2001) I applied these concepts to describe how professors designed courses; articulated their course objectives to the students; delivered the learning experience through course activities; established the expectations for student performance; and, finally, understood and interpreted students' experience of the course.

One of the most interesting challenges in my research was to find a tool that would provide a relatively consistent means of defining and assessing "synthesis" in the student products submitted to meet the requirements their professors established for them. Synthesis is the one common learning goal established by the faculty of the University for the Tier III courses I used for my research. My search for useful tools led me to the work of Biggs and Collis (1982), Biggs (1999b), and Suedfeld, Tetlock, and Streufert (1992). The taxonomies or coding systems these researchers had developed to work with a variety of student products gave me tools to approach the assessment of synthesis in student papers.

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More importantly, I have concluded through my research that a more valuable use of these tools is to assist faculty in determining appropriate learning experiences for students in their courses and to further align their course goals and the students' experiences of them. By using SOLO or the Conceptual/Integrative (C/I) Coding System in the design of courses, faculty could more effectively plan class activities focusing on an appropriately high level of intellectual activity considered to be the standard of collegiate work.

In the sections following I outline the components of the curriculum in the courses contained in this research as Ewell (1997) describes them: (1) designed, (2) expectational, (3) delivered, and (4) experienced. Faculty course proposals, syllabi, criteria for evaluation, and student products were all part of the data reviewed. Finally, I suggest that SOLO (Biggs & Collis, 1982) or the C/I Coding tool (Suedfeld, Tetlock, & Streufert, 1992) could provide tools useful to faculty in the course development process.

Designing Courses and Setting Expectations

The first components of Ewell's (1997) alignment model are the designed curriculum and the expectational curriculum. How does a department or a professor design the learning experience in a course? What learning objectives (expectations) are established for students? The courses I used in my research have a shared learning objective of synthesis. Because this is the focus established by the faculty of the university, my research focused on curricular alignment based on this learning objective. The primary question was: Do students in these interdisciplinary courses experience the primary learning outcome of synthesis in their courses and demonstrate it in their class papers?

Faculty members participate in a faculty development workshop to prepare courses for the program. The University Curriculum Council must approve their proposals for the courses they design, so a substantial effort goes into the formulation of courses for the program. The result of these efforts is a broad range of courses drawing upon the disciplinary interests of a substantial number of faculty members. Each course must involve perspectives from two or more disciplines and teach students to synthesize their learning from these disciplines.

Course Syllabi

Students who sign up for the courses described in my research do not see the course proposals that constitute the primary descriptions of the designed courses. What students see are catalog descriptions and syllabi. In addition, they receive clarifying information and specific course assignments throughout the term. The course syllabus, however, is the primary tool for establishing course goals and criteria for student success that derive from the designed course outlined by the professor in the proposal submitted to the University Curriculum Council.

Interestingly, the course syllabi that professors provided for the study were surprisingly void of student learning outcomes directed at synthesis. In fact, only two of the ten courses in the study listed explicit learning outcomes at all, although several stipulated course goals. On the other hand, two of the syllabi listed criteria for assessing student papers that approach the grading rubrics recommended by Walvoord and Anderson (1998). These descriptions indicated to students that a good deal more was expected from them than merely parroting library research.

Writing learning outcomes to elicit the demonstration of synthesis is not an easy task. The Bloom definition of synthesis that is the old standard demonstrates the problem:

> The putting together of elements and parts so as to form a whole. This is a process of working with elements, parts, etc., and combining them in such a way as to constitute a pattern or structure not clearly there before (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956, p. 162).

Faculty descriptions of expectations for learning in courses designed to "teach" synthesis have to "operationalize" it in terms more clearly understood by students. The activities designed to get at synthesis have to demand more than analysis of the literature and "reassembly" of those perspectives so that the student reveals "something not clearly there before."

Assignments for Synthesis

The assignments required in a course further demonstrate the design a faculty member has developed to achieve his or her goals. The assignments typically required by the courses are substantial essays or group projects. Additionally, a number of the courses included journaling as a part of the course requirements. The specifics of these assignments were not detailed on most of the course syllabi. Several professors gave students additional handouts describing the major assignments later in the course (Canavan, 2001).

The selection of papers, journaling, and group projects have been found to support the development of synthesis and/or critical thinking (Baxter-Magolda, 1992; Farmer & Napieralski, 1997; Wiggins, 1993). However, I found that many of the assignment descriptions for these courses asked students to "analyze" or "compare and contrast." These verbs appear in Bloom's taxonomy at a level below synthesis and do not indicate to students that they are expected to do more than collect appropriate references and report on them.

☐ **Delivered Curriculum**

Ewell's (1997) third component of curriculum is the delivered curriculum: what actually goes on in the classroom. This part of the curriculum should be, and often is, the most stimulating and enriching component. In the delivery of additional information and the exchanges between peers and instructor, the substance of the course evolves. All of the professors involved in the study spoke very fondly of the courses they taught and the learning that they believed went on in those exchanges. Indeed, Baxter-Magolda's work (1992) reported the educational value students place on the interaction among peers at the upper levels of the undergraduate curriculum. Students at these upper levels see that each of them has as much to contribute to their learning as the professor. Baxter-Magolda's research was supported in the interviews I conducted with students from the Tier III courses.

☐ **The Experienced Curriculum**

Many participating students reported that their class had provided a meaningful experience, and that they had benefited from this experience that drew them away from their major departments at an interesting time in their undergraduate careers. As seniors they had been immersed in major courses and looking ahead to graduation in a short period of time. In their Tier III courses they were required to mingle with students from other disciplinary areas and to tap into those resources as well as to explore what was often substantially a new area of study for them.

☐ **Assessing Student Products for Synthesis**

The final task was to assess the student products for achievement of synthesis. My review of individual course syllabi had provided no clear description or rubric, so I decided to apply SOLO (Biggs & Collis, 1982) and C/I Coding System (Suedfeld Tetlock, & Streufert, 1992) to the analysis (see the appendixes). SOLO was developed to assist teachers in designing curriculum by helping them establish appropriate levels of challenge for students. The C/I Coding System was developed by psychologists as a tool for assessing the complexity of student thinking when responding to specific writing prompts. Needless to say, neither system is foolproof, especially when applied to full-length papers of the type submitted for these interdisciplinary courses. Nevertheless, they did provide a framework for evaluating the extent to which student products demonstrated synthesis.

The examination of forty-three papers from the ten courses provided a range of student ability and variety of approaches to the assignments, as one would certainly expect. By their very nature, the assignments were not consistent in the demand for synthesis. Few of the assignments really indicated that a high level of synthesis was expected. Indeed, several of the ten professors still used terms like "analyze" and "compare and contrast" in their assignment descriptions. It was not surprising that twenty-seven of the forty-three papers exhibited little more than combining of findings from library resources. It occurred to me that the tools I had found would likely serve faculty as they go about the process of developing learning objectives and course assignments.

Using Solo and the C/I Coding System to Guide Curricular Alignment

Biggs (1999b) also speaks to the need to align the curriculum. In this work, and in an article he published for the AAHE (1999a), he speaks to the need to establish high goals for student learning. Presumably, when faculty use the SOLO taxonomy or the C/I descriptors, they can write essay prompts or assignment descriptions to elicit higher order thinking skills. Both of these taxonomies or coding systems indicate that, as cognitive development advances, the ability to envision multiple possibilities and to be able to explain and compare alternatives should be expected. Asking students to develop plans for solving problems based on their research would be a better alternative than simply asking them to describe and compare solutions that have been attempted (library research). Additionally, working within groups on such problems provides a real-life component of give and take as a group works toward a solution acceptable for presentation to the class.

Conclusion

The examination of the Tier III courses indicated that few faculty members in the study had "aligned" courses. They could do more to describe learning objectives concisely and clearly in order to prompt student development of synthesis. The use of the SOLO taxonomy or the Conceptual/Integrative Coding descriptors could provide useful tools to guide the development of their learning objectives. A logical extension of that work would be the development of grading rubrics for their assignments such as those described by Walvoord

and Anderson (1998). Following the assessment of student work, faculty could return to their course designs to implement change based on the information obtained. SOLO and the C/I descriptors would provide benchmarks against which to compare their own learning objectives and rubrics so that a consistently high level of intellectual activity is demanded in the courses they teach.

References

Angelo, T. A. 1995. Reassessing (and defining) assessment. *AAHE Bulletin* 48(3): 1–7.

Baxter Magolda, M. B. 1992. *Knowing and reasoning in college : Gender-related patterns in students' intellectual development.* San Francisco: Jossey-Bass.

Biggs, J. B. 1999a. Assessment: An integral part of the teaching system. *AAHE Bulletin* 51(9): 10–12.

Biggs, J. B. 1999b. *Teaching for quality learning at university : What the student does.* Buckingham, England and Philadelphia: Society for Research into Higher Education and Open University Press.

Biggs, J. B., and K. F. Collis. 1982. *Evaluating the quality of learning : The SOLO taxonomy (structure of the observed learning outcome).* New York: Academic Press.

Bloom, B. S., M. D. Engelhart, E. J. Furst, W. H. Hill, and D. R. Krathwohl, eds. 1956. *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.* New York: David McKay Co. Inc.

Canavan, C. E. 2001. A descriptive assessment of synthesis in an interdisciplinary university course. Unpublished dissertation, Ohio University, Athens, Ohio.

Ewell, P. T. 1997. Identifying indicators of curricular quality. In J. G. Gaff and J. L. Ratcliff, eds. *Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change.* San Francisco: Jossey-Bass.

Farmer, D. W., and E. A. Napieralski. 1997. Assessing learning in programs. In J. G. Gaff and J. L. Ratcliff, eds., *Handbook of the undergraduate curriculum : A comprehensive guide to purposes, structures, practices, and change.* San Francisco: Jossey-Bass.

Suedfeld, P., P. E. Tetlock, and S. Streufert. 1992. Conceptual/integrative complexity. In C. P. Smith, ed., *Motivation and personality: Handbook of thematic content analysis.* New York: Cambridge University Press.

Walvoord, B. E., and V. J. Anderson. 1998. *Effective grading: A tool for learning and assessment.* San Francisco: Jossey-Bass.

Wiggins, G. 1993. *Assessing student performance: Exploring the purpose and limits of testing.* San Francisco: Jossey-Bass.

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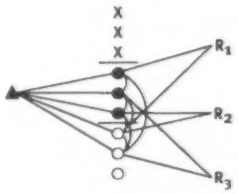
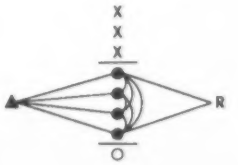
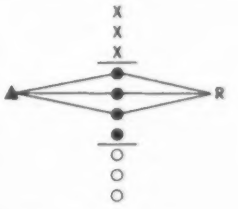
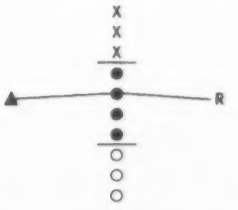
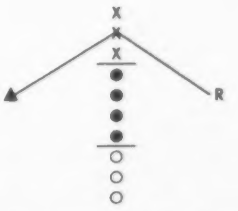
Appendix A

SOLO Summary (Biggs & Collis, 1982, p. 25)

Table 2.1

Base Stage of Cognitive Development and Response Description*

Developmental base stage with minimal age	SOLO Description	1 Capacity	2 Relating operation	3 Consistency and closure	4 Response Structure Cue / Response
Formal Operations (16+ years)	Extended Abstract	*Maximal:* cue + relevant data + interrelations + hypotheses	Deduction and induction. Can generalize to situations not experienced	Inconsistencies resolved. No felt need to give closed decisions—conclusions held open, or qualified to allow logically possible alternatives. (R_1, R_2, or R_3)	
Concrete Generalization (13-15 years)	Relational	*High:* cue + relevant data + interrelations	Induction. Can generalize within given or experienced context using related aspects	No inconsistency within the given system, but since closure is unique so inconsistencies may occur when he goes outside the system	
Middle Concrete (10-12 years)	Multistructural	*Medium:* cue + isolated relevant data	Can "generalize" only in terms of a few limited and independent aspects	Although has a feeling for consistency can be inconsistent because closes too soon on basis of isolated fixations on data, and so can come to different conclusions with same data	
Early Concrete (7-10 years)	Unistructural	*Low:* cue + one relevant datum	Can "generalize" only in terms of one aspect	No felt need for consistency, thus closes too quickly; jumps to conclusions on one aspect, and so can be very inconsistent	
Pre-operational (4-6 years)	Prestructural	*Minimal:* cue and response confused	Denial, tautology, transduction. Bound to specifics	No felt need for consistency. Closes without even seeing the problem	

*Kinds of data used: X = irrelevant or inappropriate; ● = related and given in display; ○ = related and hypothetical, not given.

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Appendix B

Integrative Complexity Coding System Summary

(Suedfeld, Tetlock, & Streufert, 1992)

SCORE OF 1: No conceptual differentiation or integration: simple, one-dimensional rules for interpreting events or making choices.

1. Compartmentalization
   a. Categorical rejection of perspectives: avoidance of values trade-offs
   b. Setting up and knocking down a "straw man"
   c. Inclusion-exclusion rules
2. Dominance of a single evaluative rule
   a. Lack of response differentiation
   b. Use of lists
3. Conflict avoidance
4. Prescriptive generalizations
5. Temporal sequencing

Flags: absolutely, all, always, certainly, constantly, convinced, definitely, entirely, forever, impossible, indisputable, irrefutable, irreversible, never, solely, surely, unconditionally, undoubtedly, unquestionably...

SCORE OF 2: Emergent differentiation (still categorical in nature).

1. Conditional acceptance of other perspectives or dimensions
2. Conditional statements
3. Conditions of a hypothetical outcome
4. Exceptions to the rule
5. Emergent recognition of alternate perspectives or dimensions
6. Increased tolerance of alternate perspectives or dimensions

Flags: but, nevertheless, while, however, though, probably, almost, usually...

SCORE OF 3: Clear differentiation but no evidence of integration. Recognition of alternative perspectives with different dimensions as relevant and legitimate.

1. Multiple alternatives: must be clearly two or more categories or rule structures to warrant a score of 3
   a. Multiple perspectives
   b. Multiple dimensions
   c. Multiple perspectives and multiple dimensions
2. Alternatives and conditions for application: complex conditional reasoning
3. Probability statements: independent causes or determinants
4. Temporal perspectives: sensitivity to impact of experience on perception
5. Increased tolerance for ambiguity: parallel, contradictory perspectives

Flags: all those for score of 2 plus: alternatively, either-or, on the other hand, meanwhile...

SCORE OF 4: Emerging integration: multiple perspectives-dimensions exist and they could interact. At least one of the following must be found.

1. Withholding judgment (further information needed)
2. Tension between alternatives
3. Integration expressed probabilistically (it is likely, it seems possible, they will probably...)
4. Integration expressed as a super ordinate statement: broad statement which encompasses the multiple dimensions

SCORE OF 5: Explicit integration: multiple interactive dimensions.

1. Mutual influence and interdependence: dynamic relationships
2. Negotiation: trade-off reasoning
3. Causal attributions
4. Synthesis: generation of a novel product

Flags: interplay, interaction, interdependency, mutuality, compromise, equilibrium, balancing, trade-off...In general, however, content flags are not useful in determining a score at this level.

SCORE OF 6: High-level interaction working across multiple levels of schemata. At least one indicator must be present.

1. Comparison of outcomes
2. Systematic analysis
3. Hypothesis testing: set values on variables in the system and predict how the system would react to a new variable

SCORE OF 7: Presence of an overarching viewpoint: Explanation of organizing principles (temporal, causal, theoretical). Discussion of ways in which levels of the problem/concept interact (demonstrating the validity of the overarching view).

1. Hierarchical integration: principles/concepts which offer an explanation for a particular event, problem, or theory
2. Comparison of outcomes
3. Systematic analysis: specific complex interactions within a complex system, using an overarching global view (a rippling effect)
4. Complex trade-offs among conflicting goals: cost-benefit analyses, for example

Coding notes: Assign the highest justifiable score.

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